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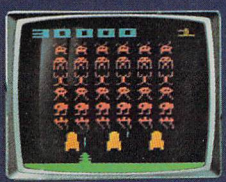
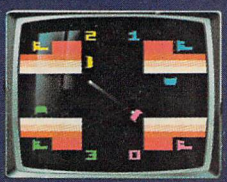
From the Editors of electronic GAMES

THE PLAYER'S STRATEGY GUIDE

to ATARI® VCS Home Video Games

Including ACTIVISION,™ TELE-ARCADE,™ and GAMES BY APOLLO™





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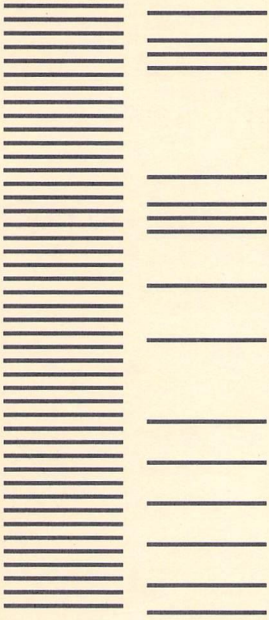

THE PLAYER'S STRATEGY GUIDE TO

ATARI®

VCS HOME VIDEO GAMES

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From the Editors of Electronic Games

ARNIE KATZ
BILL KUNKEL
with Strategy Tips from "Video" Frank Tetro, Jr.

A DELL/REESE BOOK

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DEDICATION

This book is respectfully dedicated
to Nolan Bushnell,
whose imagination and foresight
paved the way for the creation
of the Atari VCS.

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Introduction

The year was 1972. Nolan Bushnell, a then relatively unknown tinkerer, emerged from his tiny workshop with the prototype design for an entirely new form of entertainment device.

He called his creation *Pong*, and it ranks as one of the very first videogames ever produced anywhere in the world. Would the public be interested? He decided to find out by putting *Pong* machines into a few bars and other similar locations near his California home.

When the units' coin boxes were checked a few days later, they were literally choked with quarters. Bushnell quite correctly took this as a vote of confidence and tried to interest the established manufacturers of coin-op games in his invention.

No takers. None. The prevailing opinion was that videogames would never find great favor. Pinball was king, company executives explained to Bushnell, and that was that.

Still convinced he had something, the young inventer decided to turn entrepreneur by starting his own company. He named it Atari, which means "check" in the classic oriental strategy game, *Go*.

Atari grew steadily through the early and mid-1970s, venturing into the home market with dedicated chip

videogames that presented variations on the original ball-and-paddle theme. (A dedicated chip game is one in which the circuitry is designed to perform a single task and cannot be adapted for others by the user/operator.)

Videogames might have become just a curiosity if Atari had rested on its pioneering achievements. But as the level of available technology rose, the Sunnyvale, California, company's designers began to explore the possibility of something better.

That "something better" is the machine that reached the market in 1978 as the Video Computer System (VCS). Instead of having to purchase a whole new machine every time they tired of a particular videogame, owners of the Atari VCS could simply plug a different cartridge into the VCS and, possibly, switch to another form of controller. *Voilà!* Instant programmability had arrived, and the infant hobby of electronic gaming would never be the same again.

Bushnell sold his company to Warner Communications for a little less than thirty million dollars, but the new owners continued to market the Atari VCS aggressively.

The emphasis quickly shifted from the hardware to the software. Atari concentrated on developing the widest possible selection of games. After all, they reasoned, what good is programmability if there isn't a wide selection of programs?

Their analysis of the situation proved to be a direct hit. Atari became Warner's most profitable division in 1981, and more than half of the conglomerate's huge earnings will originate with its videogame subsidiary in 1982. Despite competition from several other game-

playing systems, the VCS reigns supreme, the choice of more than two out of every three home arcaders.

This year alone more than three million families will buy VCS units before the end of the upcoming holiday gift-giving season. People in other lands have discovered the joys of videogaming with the VCS too. Exact statistics are hard to obtain—Atari has become reticent about disclosing the precise magnitude of its prosperity—but reports are that there are already more than one million VCS owners in the United Kingdom. Other countries have also shown quite a bit of interest in the VCS, so it won't be long before the fraternity of Atari owners girdles the globe.

A contributing factor in the widespread popularity of the VCS is the appearance of independent software suppliers. Activision, formed around a quartet of former Atari game designers, has produced a string of excellent titles that has made it, almost overnight, into a multimillion-dollar concern. ACTV sold more than 3.5 million videogame cartridges in 1981 and expects to substantially increase that total in 1982.

Encouraged by Activision's success, other suppliers have entered the field. Counting in the dozen cartridges Atari plans to produce this year, VCS owners may well be in the enviable position of being able to select from as many as sixty new games during the next twelve months—more than double the present number of available software programs.

The editors of *Electronic Games* magazine, the only consumer publication exclusively devoted to the hobby of electronic gaming, have long felt the need for the book that you hold in your hands. Playing videogames is always fun, but performing really well is even

more enjoyable. This strategy guide is intended to provide advice on how to boost your scores in the most popular VCS-compatible cartridges.

So get out your Atari VCS, open the book to the section dealing with that game that always gives you fits and see if our staff of arcade aces can't fatten your point totals. It'll take some practice, of course, but don't be surprised when you begin winning a much larger percentage of the videogames you play.

Buyer's Catalog of Atari® VCS-Compatible Games

The Catalog: A Brief Primer

Some of the terms used in this catalog of Atari VCS-compatible cartridges may not be immediately clear. Here are some elaborations:

Type of Game—This classifies each cartridge according to design category. Of course, two maze chase games, for instance, could be miles apart in actual execution.

Number of Players—Self-explanatory, except to mention that some games that are ostensibly for two players are actually contests in which the participants alternate turns with each person essentially playing solitaire.

Solitaire Suitability—This indicates how good a game the cartridge is for one participant.

Head-to-Head Suitability—This is a rating of the quality of the cartridge if more than one arcader at a time is involved.

Complexity—This is our highly subjective judgment of how difficult the game is to play at the "ace" ability level. The ratings ascend in the following order: very easy, easy, moderately easy, moderately challenging, challenging, very challenging, moderately hard, hard, very hard, and almost impossible.

ADVENTURE / Atari

Type of Game: Adventure

Number of Players: 1

Solitaire Suitability: Excellent

Head-to-Head Suitability: Not Applicable

Complexity: Hard

Description: Make the electronic quest through a land where magic works and fierce monsters are always on the prowl for an unwary hero or heroine.

AIR-SEA BATTLE / Atari

Type of Game: Military-Theme Shooting Gallery

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Excellent

Description: In Torpedo, the most popular of the five games on this cartridge, players move a submarine back and forth across the bottom of the screen, firing missiles at targets speeding across the playfield above their position.

For strategy hints see page 63.

ASTEROIDS / Atari

Type of Game: Space Shootout/Target

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Hard

Description: Each player controls a spaceship with the joystick and attempts to score points by atomizing space rocks, UFOs, and enemy satellites. Some variations offer the possibility of protective shields, flip steering, or hyperspace travel.

For strategy hints see page 70.

BACKGAMMON / Atari

Type of Game: Electronic Boardgame

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Moderately Challenging

Description: One of the most popular boardgames in history comes to the home TV screen. Rules follow the real thing fairly closely.

BARNSTORMING / Activision

Type of Game: Flying/Steering

Number of Players: 1

Solitaire Suitability: Excellent

Head-to-Head Suitability: Not Applicable

Complexity: Moderately Challenging

Description: The arcader pilots a biplane over an obstacle course in a race against the clock. Pilots must fly a zigzag course over windmills and through barns while avoiding flocks of geese.

For strategy hints see page 78.

BASKETBALL / Atari

Type of Game: Sports Simulation

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Very Good

Complexity: Moderately Easy

Description: This cartridge presents a full-court game of one-on-one basketball. Electronic coaches have some control over shot selection and can block and steal when on the defensive.

For strategy hints see page 83.

BOWLING / Atari

Type of Game: Sports Simulation

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Excellent

Complexity: Moderately Easy

Description: A well-conceived translation of real-life pin-bashing offers electronic athletes some entertaining options, including steerable balls, not always found in genuine alleys.

BOXING / Activision

Type of Game: Sports Simulation

Number of Players: 1–2

Solitaire Suitability: Very Good

Head-to-Head Suitability: Excellent

Complexity: Easy

Description: Players move their on-screen pugilists around a ring seen in overhead perspective. Pushing the action button causes the fighter to throw the punch appropriate to the relative positions of the combatants.

For strategy hints see page 88.

BRAIN GAMES / Atari

Type of Game: Educational

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Moderately Easy

Description: Here's an opportunity to have some fun with numbers, symbols, and series of musical notes. Younger VCS owners may find this group of variations quite enjoyable.

BREAKOUT / Atari

Type of Game: Ball-and-Paddle/Target

Number of Players: 1–4

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Moderately Easy

Description: A clear-the-field game in which players try to dismantle a multicolored brick wall one chunk at a time. A major variation, Breakthru, permits smashing through the entire wall in one shot.

For strategy hints see page 93.

BRIDGE / Activision

Type of Game: Cards

Number of Players: 1

Solitaire Suitability: Excellent

Head-to-Head Suitability: Not Applicable

Complexity: Very Challenging

Description: If you love to play contract bridge, but can't always put together a table, this program will provide a source of much pleasure. The computer plays a fairly effective game.

CASINO / Atari

Type of Game: Gambling

Number of Players: 1–4

Solitaire Suitability: Excellent

Head-to-Head Suitability: Excellent

Complexity: Challenging

Description: You don't have to visit Las Vegas or Atlantic City for Blackjack or Stud Poker if you've got this cartridge. Casino also includes a solitaire poker game for those who can't find live marks.

CHAMPIONSHIP SOCCER / Atari

Type of Game: Sports Simulation

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Excellent

Complexity: Challenging

Description: Players direct four-man teams—three players and a goalie—up and down the vertically scrolling playfield in an attempt to score goals while keeping the opposing side from doing likewise.

For strategy hints see page 100.

CHECKERS / Activision

Type of Game: Electronic Boardgame

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Moderately Challenging

Description: Activision has endowed its version of this classic strategy game with an arresting visual treatment that makes it pleasant to play.

CIRCUS ATARI / Atari

Type of Game: Ball-and-Paddle/Target

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Moderately Challenging

Description: Players bounce a pair of clowns up and down on a horizontally mobile teeter-totter and attempt to break three rows of colored balloons at the top of the playfield.

For strategy hints see page 108.

CODEBREAKER / Atari

Type of Game: Electronic Boardgame

Number of Players: 1–2

Solitaire Suitability: Very Good

Head-to-Head Suitability: Good

Complexity: Very Challenging

Description: This is an electronic version of the popular game of creating and breaking coded messages. This can prove to be quite a stimulating mental exercise.

COMBAT / Atari

Type of Game: Arcade-style Military

Number of Players: 2

Solitaire Suitability: Not Applicable

Head-to-Head Suitability: Good

Complexity: Easy

Description: This cartridge offers a variety of shootouts with a war motif, including battles between tanks, biplanes, and modern jet planes.

CONCENTRATION / Atari

Type of Game: Electronic Boardgame

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Easy

Description: You'll need an excellent memory to do well at this game. Segments of the board are temporarily uncovered—and then turned facedown again—as players seek to discover matching pairs.

DODGE 'EM / Atari

Type of Game: Maze Chase

Number of Players: 1–2

Solitaire Suitability: Very Good

Head-to-Head Suitability: Very Good

Complexity: Very Challenging

Description: Players steer racers around a mazelike track of concentric rectangles, sweeping up dots and avoiding collisions with a computer- or player-controlled crash car.

For strategy hints see page 114.

DRAGSTER / Activision

Type of Game: Racing

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Very Challenging

Description: Can you get your hot rod to flame down that measured mile in the shortest possible time? The test is cranking your car up to top speed without blowing your engine and dropping out of the competition.

FISHING DERBY / Activision

Type of Game: Touch Target

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Excellent

Complexity: Moderately Easy

Description: The electronic angler dangles a line off the end of a pier and attempts to haul in fish—valued from two to six points—which are swimming back and forth in the water below.

For strategy hints see page 120.

FOOTBALL / Atari

Type of Game: Sports Simulation

Number of Players: 2

Solitaire Suitability: Not Applicable

Head-to-Head Suitability: Fair

Complexity: Hard

Description: Would-be Vince Lombardis may enjoy this two-player version of pigskin action. Teams can run, pass, and score first downs in this electronic football game.

FREEWAY / Activision

Type of Game: Steering

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Excellent

Complexity: Moderately Easy

Description: This is the cartridge that lets arcaders explore the metaphysical implications of the joke: "Why did the chicken cross the road?" Getting the bird to the other side through ten lanes of traffic won't be easy.

GOLF / Atari

Type of Game: Sports Simulation

Number of Players 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Excellent

Complexity: Moderately Hard

Description: One or two duffers can hack around this nine-hole course and experience a variety of common golfing situations. When a ball reaches the green, a secondary playfield appears on the screen to facilitate the putting phase.

GRAND PRIX / Activision

Type of Game: Racing/Driving

Number of Players: 1

Solitaire Suitability: Excellent

Head-to-Head Suitability: Not Applicable

Complexity: Moderately Challenging

Description: Race your formula car along a variety of tracks, including the famed course at Monte Carlo in this re-creation of motor sports action. Dodging other cars and maintaining control despite oil slicks are the main challenges.

HANGMAN / Atari

Type of Game: Educational

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Easy

Description: This is the electronic rendition of the familiar contest in which players try to guess the letters of a word. Every miss brings the hangman one step closer to choking off further play.

HOME RUN / Atari

Type of Game: Sports Simulation

Number of Players: 1–2

Solitaire Suitability: Fair

Head-to-Head Suitability: Fair

Description: Arcaders use the joystick to pilot on-screen teams composed of one to four men in this attempt to produce an electronic version of the national pastime. The stick is also employed to pitch a wide assortment of curves and sliders.

For strategy hints see page 126.

HUMAN CANNONBALL / Atari

Type of Game: Target

Number of Players: 1–2

Solitaire Suitability: Fair

Head-to-Head Suitability: Fair

Complexity: Moderately Challenging

Description: Fly through the air with something less than the greatest of ease by getting shot out of a cannon, circus-style. The goal is, of course, to make a happy landing.

ICE HOCKEY / Activision

Type of Game: Sports Simulation

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Excellent

Complexity: Somewhat Hard

Description: Playing either against another human being or the computer, the video coach directs a two-man team in this clever re-creation of real-life ice action. Control switches from the forward to the goalie, depending on which one is closest to the puck.

For strategy hints see page 132.

INDY 500 / Atari

Type of Game: Racing

Number of Players: 1–2

Solitaire Suitability: Very Good

Head-to-Head Suitability: Excellent

Complexity: Moderately Easy

Description: A total of fourteen game variations enliven this auto sports cartridge. It is priced somewhat higher than all the other early Atari releases because it includes a pair of specially designed game controllers.

KABOOM! / Activision

Type of Game: Ball-and-Paddle/Catch

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Challenging

Description: The player moves a stack of three water buckets back and forth at the bottom of the screen and tries to catch the bombs lobbed over the wall by an on-screen character located near the top.

For strategy hints see page 139.

LASER BLAST / Activision

Type of Game: Science Fiction Invasion/Target

Number of Players: 1

Solitaire Suitability: Excellent

Head-to-Head Suitability: Not Applicable

Complexity: Moderately Easy

Description: This cartridge turns the tables on the aliens in Space Invaders! This time the arcader is carrying the fight to the monsters, attacking the alien base with a fleet of flying saucers.

For strategy hints see page 144.

MAZE CRAZE / Atari

Type of Game: Maze Chase

Number of Players: 1–2

Solitaire Suitability: Fair

Head-to-Head Suitability: Good

Complexity: Moderately Challenging

Description: Arcaders play at electronic cops and robbers in this battle for survival within a labyrinth. Most variations require the cop to successfully walk his beat despite the threat posed by the criminals.

MISSILE COMMAND / Atari

Type of Game: Science Fiction Invasion/Target

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Hard

Descripton: The arcader defends the six cities of the home planet against an assortment of rocket weapons raining down from the top of the playfield.

For strategy hints see page 150.

NIGHT DRIVER / Atari

Type of Game: Driving

Number of Players: 1

Solitaire Suitability: Excellent

Head-to-Head Suitability: Not Applicable

Complexity: Moderately Easy

Description: Would-be A. J. Foyts steer their cars down a winding track in the dead of night. The turns are sometimes unbelievably sharp—and oncoming cars present a continual danger.

For strategy hints see page 156.

OTHELLO / Atari

Type of Game: Electronic Boardgame

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Moderately Challenging

Description: This is the famous contest of flipping disks. Its seesaw action keeps things exciting. The machine is a fair, if unexceptional, opponent.

OUTLAW / Atari

Type of Game: Gunfight

Number of Players: 1–2

Solitaire Suitability: Fair

Head-to-Head Suitability: Good

Complexity: Easy

Description: Slap leather and taste the thrill of victory at your personal *High Noon* with this showdown gunfight game. There's also a target game when you can't find anyone brave enough to draw against you.

PAC-MAN / Atari

Type of Game: Maze Chase

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Fair

Complexity: Moderately Challenging

Description: The Pac-Man gobbler is steered up and down the pathways of the maze with hungry goblins in hot pursuit. The player scores points by munching dotted lines, power pills, vitamins, and, at times, the goblins themselves.

For strategy hints see page 162.

SKEET SHOOT / Games by Apollo

Type of Game: Target

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Easy

Description: This cartridge offers marksmen the opportunity to try their luck at hitting clay pigeons flung high into the air above their shooting stations.

SKIING / Activision

Type of Game: Sports Simulation

Number of Players: 1

Solitaire Suitability: Very Good

Head-to-Head Suitability: Not Applicable

Complexity: Moderately Challenging

Description: Arcaders ski down the electronic slopes in two events—slalom and downhill. The joystick is used to align the tips of the player's skis and thereby make course adjustments.

SKY DIVER / Atari

Type of Game: Target

Number of Players: 1–2

Solitaire Suitability: Fair

Head-to-Head Suitability: Fair

Complexity: Moderately Easy

Description: Find out if you've got what it takes to be a successful parachutist in this fairly straightforward videogame. The players must balance several factors to obtain the desired result: an on-target landing.

SLOT RACERS / Atari

Type of Game: Driving Shootout

Number of Players: 2

Solitaire Suitability: Not Applicable

Head-to-Head Suitability: Good

Complexity: Moderately Challenging

Description: A pair of skillful drivers with the killer instinct zoom up and down the streets of a city, firing hood-mounted cannons at each other. There are four different mazes on which to play.

SPACECHASE / Games by Apollo

Type of Game: Science Fiction Invasion/Target

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Hard

Description: Players manipulate a cannon located toward the bottom of the playfield and fire at a small number of randomly moving targets representing an alien invasion fleet.

For strategy hints see page 169.

SPACE INVADERS / Atari

Type of Game: Science Fiction Invasion/Target

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Challenging

Description: The arcader controls a horizontally mobile cannon, located at the bottom of the playfield, and attempts to shoot down hordes of aliens which march toward the bottom of the field.

For strategy hints see page 177.

SPACE WAR / Atari

Type of Game: Space Shootout

Number of Players: 1–2

Solitaire Suitability: Fair

Head-to-Head Suitability: Fair

Complexity: Moderately Easy

Description: Players maneuver individual ships while attempting to blast their opponent's craft out of the ether: combat in space.

STAMPEDE / Activision

Type of Game: Target

Number of Players: 1

Solitaire Suitability: Excellent

Head-to-Head Suitability: Not Applicable

Complexity: Challenging

Description: This ridin' an' ropin' contest puts arcaders in control of an electronic wrangler who must round up the herd. The mounted cowboy attempts to lasso one dogie at a time without letting any get past him.

For strategy hints see page 183.

STREET RACER / Atari

Type of Game: Driving

Number of Players: 1–4

Solitaire Suitability: Very Good

Head-to-Head Suitability: Good

Complexity: Moderately Easy

Description: Although this cartridge also includes some head-to-head shootouts, this is fundamentally a contest to see which arcader can best navigate around various road obstacles, mainly other automobiles.

SUPER-BREAKOUT / Atari

Type of Game: Ball-and-Paddle/Target

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Good

Complexity: Moderately Easy

Description: This is an ingenious elaboration of the classic clear-the-field game in which the player attempts to clear a multicolored wall one brick at a time.

For strategy hints see page 188.

SUPERMAN / Atari

Type of Game: Adventure

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Poor

Complexity: Moderately Challenging

Description: A solo arcader, as the Man of Steel, must capture Lex Luthor and the members of his gang as well as reassemble the Metropolis Bridge while being timed by an on-screen clock.

For strategy hints see page 194.

SURROUND / Atari

Type of Game: Steer-the-Line

Number of Players: 1–2

Solitaire Suitability: Fair

Head-to-Head Suitability: Very Good

Complexity: Easy

Description: Players steer cursors across an otherwise blank field, building up a twisting tail as action progresses. The participant who keeps his line growing the longest wins the round.

For strategy hints see page 200.

TENNIS / Activision

Type of Game: Sports Simulation

Number of Players: 1–2

Solitaire Suitability: Excellent

Head-to-Head Suitability: Excellent

Complexity: Moderately Easy

Description: Tennis departs from the Pong-derived traditions of video tennis to produce a game with a lot of the feel of the net sport. In either the one- or two-player modes arcaders attempt to fake foes out of position for a point-scoring smash.

For strategy hints see page 205.

3-D TIC-TAC-TOE / Atari

Type of Game: Electronic Boardgame

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Easy

Description: The familiar pencil-and-paper game literally takes on an added dimension with a graphic treatment that is quite pleasant and easy to understand.

VIDEO CHECKERS / Atari

Type of Game: Electronic Boardgame

Number of Players: 1-2

Solitaire Suitability: Good

Head-to-Head Suitability: Good

Complexity: Moderately Challenging

Description: This version of the classic strategy game offers nine graduated levels of play, ranging from novice to master. It is usually capable of matching the skill level of just about any player.

VIDEO CHESS / Atari

Type of Game: Electronic Boardgame

Number of Players: 1

Solitaire Suitability: Good

Head-to-Head Suitability: Not Applicable

Complexity: Hard

Description: Graduated levels of skill make this a handy cartridge for dedicated pawn-pushers to own. It isn't exactly a master, but it will certainly give casual players an interesting game.

VIDEO OLYMPICS / Atari

Type of Game: Ball-and-Paddle/Sports

Number of Players: 1–4

Solitaire Suitability: Good

Head-to-Head Suitability: Excellent

Complexity: Moderately Easy

Description: This cartridge, in its selection of fifty variations, includes just about every variation on the classic Pong-type contest that any arcader could want. Volleyball is particularly excellent.

For strategy hints see page 210.

VIDEO PINBALL / Atari

Type of Game: Electronic Pinball

Number of Players: 1–2

Solitaire Suitability: Good

Head-to-Head Suitability: Fair

Complexity: Moderately Easy

Description: This is a video version of an arcade-style flipper game. It features drop targets and roll-overs along with a trio of thumper-bumpers and other minor features found on the real tables.

WARLORDS / Atari

Type of Game: Ball-and-Paddle/Target

Number of Players: 1–4

Solitaire Suitability: Fair

Head-to-Head Suitability: Excellent

Complexity: Challenging

Description: This is an exceedingly clever extrapolation from the first-generation wall-bashing cartridges. Up to four players attempt to knock down enemy castles and kill the kings inside.

PLAYER'S STRATEGY GUIDES

Air-Sea Battle

Ability Scores

	Anti-Aircraft (var. #2)	*Torpedo* (var. #8)	*Shooting Gallery* (var. #14)	*Polaris vs. Bomber* (var. #22)
Grand Master	+ 30 pts.	+ 30 pts.	+ 30 pts.	+ 10 pts.
Master	+ 20 pts.	+ 20 pts.	+ 20 pts.	+ 7 pts.
Ace	+ 10 pts.	+ 10 pts.	+ 10 pts.	+ 4 pts.
Average	+ 5 pts.	+ 5 pts.	+ 5 pts.	+ 2 pts.
Novice	− 5 pts.	− 5 pts.	− 5 pts.	− 3 pts.

NOTE: If one participant is playing with the difficulty switch in the "A" position, add 15 pts. to his or her margin of victory.

Point Values

Anti-Aircraft (var. #1)
  Each Object: 1 pt.
Anti-Aircraft
(other variations)
  Small Jet: 4 pts.
  Large Jet: 3 pts.
  Helicopter: 2 pts.
  747: 1 pt.
Shooting Gallery
  Rabbit: 3 pts.
  Duck: 2 pts.
  Clown: 1 pt.
Polaris vs. Bomber
  Each Kill: 1 pt.

Torpedo (var. #7)
  Each Object: 1 pt.
Torpedo (other variations)
  PT Boat: 4 pts.
  Carrier: 3 pts.
  Pirate Ship: 2 pts.
  Freighter: 1 pt.
Polaris
  Same values as targets in Torpedo
Bomber
  Same values as targets in Anti-Aircraft

How It Plays

Air-Sea Battle is the umbrella for a group of five distinct contests, all loosely classifiable as target games and most sporting a military theme. Here's a brief rundown of each of them:

Anti-Aircraft. The arcader controls an antiaircraft gun located at the bottom of the screen. A variety of targets scoot across the screen near the top of the playfield. The gunner can alter the muzzle angle with the joystick obtaining inclinations of 30°, 60°, or 90°.

Torpedo. Moving the joystick to the left or right sends the submarine at the bottom of the screen heading in the desired direction. Torpedoes are always fired straight up at the military prizes, which enter the playfield from the extreme left or right edges.

Shooting Gallery. This combines the joystick action of the previous two games and permits the player to alter the ground position and angle of fire for every shot. Targets move across the screen in either direction, as in *Anti-Aircraft* and *Torpedo.*

Polaris. The player's submarine moves constantly across the bottom of the screen, though the rate of movement can be increased or decreased through use of the joystick. Targets are moving across the screen near the top of the playfield and may enter from either edge.

Bomber. This time the player commands a bomber that moves continuously across the screen. Its speed is varied by employing the joystick. Targets sail the surface of the water below.

Polaris vs. Bomber. This combines the previous two games. The extra targets are gone, and it's a straight

head-to-head showdown between bomber pilot and submarine skipper. Both craft are moving across the screen constantly, though the rate of movement may be varied with the joystick. Pushing the action button launches a torpedo or drops a bomb, as appropriate.

The most important frill available in this cartridge is the option of guided missiles. This allows the arcader to affect the flight of his rockets after they are launched by moving the joystick in the desired direction. Of course the submarine, gun, or whatever is also moved at the same time.

The difficulty factor, if it is used, will reduce torpedoes, rockets, and missiles to one fourth their previous size.

Some variations also include obstacles in the form of balloons that also move across the screen, situated between the real targets and the shooter. The balloons don't score, but they do provide a bit of distraction for electronic marksmen.

Strategy

Air-Sea Battle holds a special place close to the hearts of many home arcade veterans. It was one of the first titles Atari introduced for its then-new VCS in 1978, and it's still the favorite of many players.

Of all the many contests contained on this cartridge, *Torpedo* (variation #8) has earned the reputation of being one of the most widely played head-to-head videogames. Therefore most of the tips contained in this section will focus on *Torpedo* and, even more specifically, on the variation in which gunners have an arsenal of guided missiles.

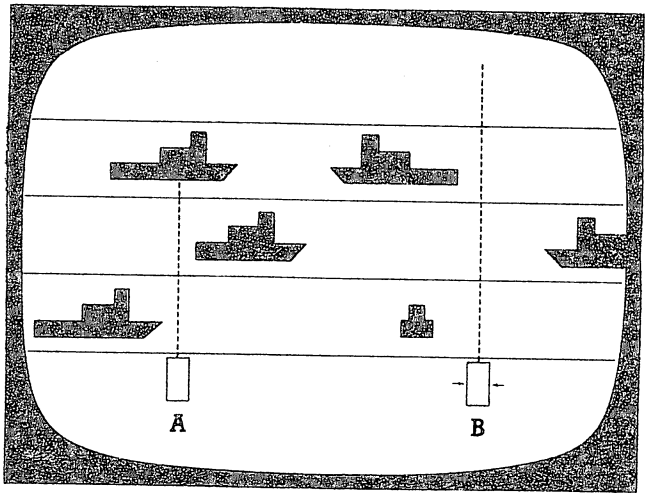
The first thing any *Torpedo* novice should notice is the pattern in which the various targets come into play. About half come onto the screen from each edge, though the actual order of appearance is definitely *not* a strict left-right alternation. Each player's submarine can only traverse half the screen, so particular attention must be paid to the ships that sail into view on the side of the playfield that your sub is patrolling.

These targets should be your main concern. Every one that gets safely past your barrage could well turn out to be a virtual gift for the other player. Conversely, there's no sense setting up your submarine to nail a PT boat that has churned into the action on the far side of the screen until you have a very good reason to believe that your foe is not going to send it to the bottom of the sea.

The golden rule in *Torpedo* is: Never switch targets in midfight. It will be tempting, sometimes almost irresistibly tempting, to divert a torpedo toward a ship that will net a few more points. Don't do it for any reason. Recalibrating the shot not only wastes time, but it greatly increases the chance for missing both perspective targets!

Which targets should you choose? Two low-value ships will frequently be worth more than a single aircraft carrier, but they also take more time and trouble to destroy. Always seek the higher-point targets, but never give up on dispatching a ship just because something worth more points glides onto the playfield.

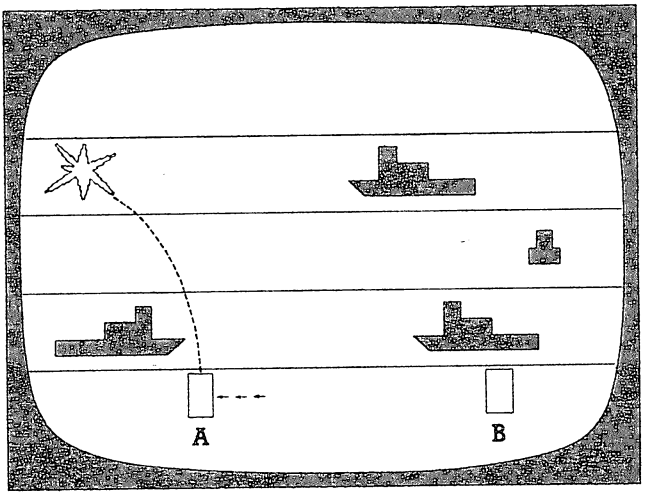
There's a schism among players when it comes to picking the best place to station your sub when it is not actively engaged in clearing the surface of ships. Some counsel putting it as close to the edge as possible.



Player B changed his target at the last second and missed both.

These arcaders like to launch metal fish right at the edge of their territory. This will sometimes nip an entering ship just as it appears, and it also puts the player in position to make a fairly dramatic steering move toward the center of the screen if this proves necessary.

Others feel more comfortable with their submarine stationed as close to the centerline of the screen as possible. They will sight an approaching vessel the second it pops into view at the side and launch a torpedo in its direction. They steer it home with the same motion that sends the sub itself zooming along the bottom to the extreme edge. From this point it can



Player A moves to the left and fires simultaneously to achieve an arc in the missile path.

sweep back toward the centerline, launching a second rocket in the process, to nail another ship entering just after the first.

If competing in variation #11, you'll have the additional problem of low-riding aquatic mines. They are worthless, but may sometimes shield valuable ships from your wrath. Don't waste a lot of time exploding them, but do feel free to thin them out if they become a nuisance.

Polaris vs. Bomber is another *Air-Sea Battle* game that will often get a workout, particularly after a tough

session of *Torpedo* when the cartridge is so handy. In our experience only total novices or dyed-in-the-wool experts ever suggest a few cheery rounds of this nerve-shattering duel. It's that kind of game.

Since both the submarine and the plane are always moving across the screen, the trick is to vary the tempo at the right time. Always slow down or speed up immediately after your rival scores a hit. Otherwise he's likely to get a second or third on your craft before you even know what happened. Once a good player gets in the groove, he'll put so many bombs or torpedoes into your boat or plane that the game will be over before it has hardly begun.

On the other hand once you score a kill, attempt to keep the action progressing at exactly the same pace. This will bring attacks on your opponent under precisely the same circumstances time after time.

Asteroids

Ability Scores

	Slow Asteroids (var. #1)	*Fast Asteroids* (var. #6)
Grand Master	250,000	125,000
Master	150,000	75,000
Ace	75,000	15,000
Average	25,000	10,000
Novice	10,000	5,000

NOTE: Using the easier "B" difficulty setting reduces rating one notch.

Point Values

Small Asteroids: 100 pts. Satellites: 200 pts.

Medium Asteroids: 50 pts. UFOs: 1,000 pts.

Large Asteroids: 20 pts.

Bonus Scoring: Depending on the variation, an extra Cosmic Ship is earned after 5,000, 10,000, or 20,000 points is scored.

How It Plays

As a pilot in the Cosmic Space Patrol you must utterly destroy the assorted interstellar boulders that careen toward you from all directions. This means doing more than just hitting each target as it approaches; big asteroids break up into smaller ones when blasted by your photo torpedoes and must be vaporized with follow-up shots.

Players use a joystick controller to direct a Cosmic Ship, firing the weapon by pressing the action button. Pushing the stick forward provides thrust for forward flight. Moving it to the left rotates the ship counterclockwise, while moving it to the right spins it in the opposite direction. Yanking the stick toward you will activate any special features possible in the variation in play.

When the difficulty switch is set to "A" (hard), satellites and UFOs are added to the more passive targets. Either can fire back at the player's ship, though the UFOs, which do not appear until 15,000 points are tallied, are the greater hazard.

A normal game consists of four rounds (or "lives"). In most variations the player earns extra ships by scoring a set amount of points. The arrival of such reinforcements is signaled by a beeping sound. Depending on which game number is chosen, such bonus ships are accumulated every 5,000, 10,000, or 20,000 points.

Special features: Variations #1 through #8 (one player) and #34 through #41 (two players) let the player avoid danger by disappearing from the screen into hyperspace, rematerializing at some random point

on the screen. Games #9 through #16 and #42 through #49 (two players) offer the protection of shields. Holding them in place for more than two seconds, however, will cause the Cosmic Ship to explode. In versions #25 through #32 (one player) and #58 through #65 (two players), flip steering permits the pilot to turn the craft 180° without the bother of rotating it.

Approximately half of *Asteroids'* sixty-six variations utilize asteroids that move at a fast speed, while the rest employ asteroids that poke along at a somewhat more sedate velocity.

Strategy

A nonlinear game of this type presents players with the stiffest kind of videogaming challenge. *Asteroids* doesn't have the patterned arrangement found in such contests as *Space Invaders* and *Pac-Man,* and thus is harder to master by simple rote learning.

It is far easier to predict the angles and speeds of the space rocks in the VCS cartridge than it is in the commercial arcade original. The coin-op device uses a vector graphics monitor that divides the screen into four equal sections. This facilitates on-screen movement of several objects at the same time in different directions.

Asteroids in the home version must all travel at the same speed because of the limitations inherent in the rasterscan technology used in television sets. This makes timing your shots a lot easier.

It's generally a good idea to fire in double bursts.

This sequenced firing pattern lets you skrag—obliterate—the main rock with the first blast and obliterate at least part of the resulting debris with the second.

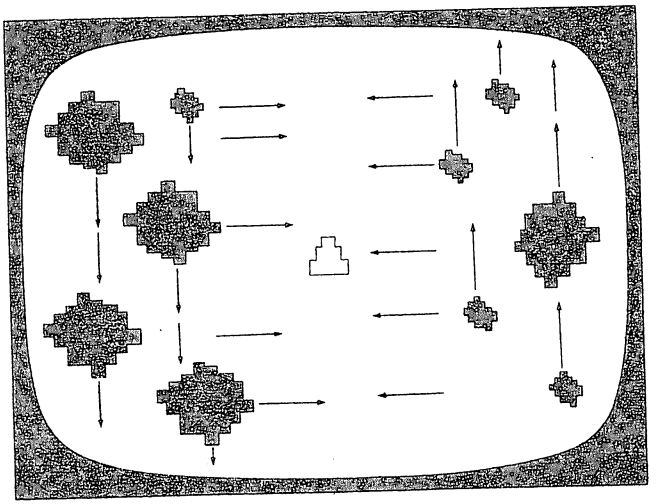
As with its big coin-op brother VCS *Asteroids* puts a lot of emphasis on fancy navigating. Practice applying different combinations of thrust and rotation until you have the steering under fine enough control to thread between chunks of space flotsam when the situation demands such skin-of-the-teeth escapes.

The best way to practice steering is to set *Asteroids* to game #1 with the difficulty switch in the "B" (easy) position. This eliminates the deadly mystery ships from the program. Destroying all but one asteroid will leave a virtually blank screen on which to experiment.

The principle underlying the "thrust" joystick position is fairly simple and more or less in accordance with the three laws of motion. The longer thrust is applied, the faster the ship will fly. To bring it to a stop, turn it 180° clockwise or counterclockwise and apply an equal amount of rocket power in the opposite direction. After mastering the basics, attempt more complicated maneuvers like veering and making sharp turns.

There are essentially two versions of the game—slow *Asteroids* and fast *Asteroids*. Actually this is a misnomer, because despite Atari's terminology the distinction is much more subtle than just having the game take place at different speeds.

The "slow" asteroids always begin the same way. The rocks on the left side of the screen head toward the bottom, while those on the right move toward the top. The center channel is empty, except for the gamer's Cosmic Ship. The asteroids will continue to travel in almost the same direction even after getting

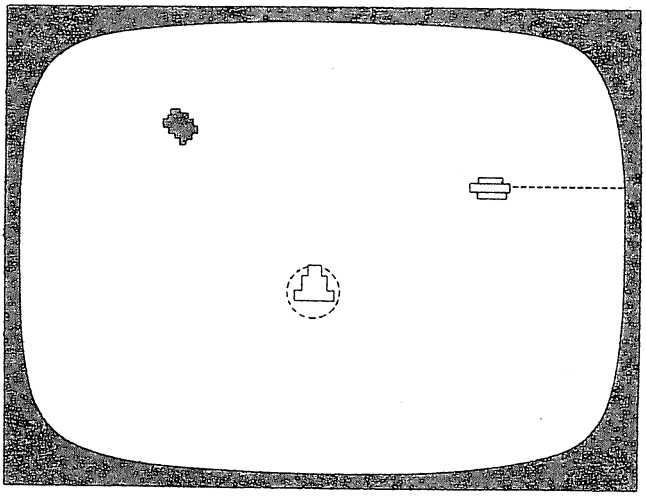


In "slow" Asteroids, the rocks on the left move down, those on the right drift up; both groups move slowly toward the center.

hit. The meteoroids on the left will veer *slightly* to the right and vice versa.

In "slow" *Asteroids* it is vital to notice how the space debris scrolls off the screen. If it just missed your ship as it whizzed by on your left, chances are good that the rock will run right over your position the next time it shows up.

Fast *Asteroids* presents a totally different situation. A space rock flies in the opposite direction from the one from which it is shot. In other words a "fast" asteroid hit from the left will send two smaller chunks



Leave a small asteroid on the screen and rotate your cannon while waiting for UFOs to appear.

spinning off to the right. This makes keeping track of the pattern of scrolling a good deal harder than the "shooting gallery" motion in the easier versions.

And now for a few words about the "hyperspace" option. Unless you're a novice and stuck in a bad spot that requires you to move somewhere—anywhere—the hyperspace command is best forgotten. Hyperspace takes the game out of the player's control, which is the worst thing that can happen to the skilled videogamer. Hyperspace has a funny way of hauling a ship out of the frying pan and putting it into the fire.

Masters of the coin-op *Asteroids* are often devoted to the strategy of stalking the so-called "mystery ships," the satellites and UFOs that pop up randomly on the screen. These bonus targets, worth 200 and 1,000 points respectively, are juicy targets, if you can get them quickly.

Here's how the mystery ship-hunters do it: Eliminate all but one meteorite, move to the center of the screen, and start the ship spinning in either direction. As long as a single asteroid remains, mystery ships will keep on coming. Zap them instantly and watch those points pile up.

Variations that allow the "shield" option will even let the player triumph over the lingering problem posed by that last, lone rock. When the space boulder passes over the ship, engage the shields and let it continue. This will permit you to hold your craft at center-screen, the best spot from which to assault unsuspecting motherships. It also provides a measure

Video Frank Says:

Do as little steering as possible and move only to avoid certain death.

of safety in case one of the mystery ships blunders into the single asteroid, causing the screen to immediately fill with a new batch of rocks.

Players will quickly learn that all mystery ships aren't created equal. The smaller probe ship (satellite) is both more maneuverable and, by virtue of its size, intrinsically harder to nail. This is a good point to keep in mind during search-and-destroy missions against the bonus targets.

Really hotshot players should try their hand at tournament *Asteroids* (game #6, difficulty "A").

Barnstorming

Ability Scores

	Barn-storming (var. #1)	*Barn-storming* (var. #2)	*Barn-storming* (var. #3)
Grand Master	31.0 sec.	49.0 sec.	52.0 sec.
Master	33.3 sec.	51.0 sec.	54.0 sec.
Ace	35.0 sec.	53.5 sec.	56.0 sec.
Average	37.3 sec.	55.5 sec.	58.3 sec.
Novice	39.0 sec.	57.0 sec.	60.0 sec.

NOTE: If the left difficulty switch is in the "A" position, subtract 2.0 seconds. If the right difficulty switch is set on "A," subtract 0.5 sec. from total elapsed time.

Point Values

Crashing inside a barn incurs a two-second penalty. Missing a barn altogether adds one additional barn to the end of the course.

How It Plays

The object of *Barnstorming* is to fly over a specific number of windmills and through an equal number of barns in the shortest possible time as measured by the on-screen clock. Striking a barn, a windmill, or one of the gaggles of geese gliding across the sky will tack as much as two seconds onto the pilot's score.

The joystick functions as it would in a conventional airplane. That is, push it forward when you want the plane to dive and pull it toward you to send the aircraft into a climb. The action button is the accelerator and must be pushed to start a round of play. Once the biplane takes wing, it is not necessary to keep pressing the throttle to maintain current speed, but pushing it *will* cause the craft to go faster.

The difficulty switches can be adjusted to make *Barnstorming* even more challenging. Put the left-side switch at "A" to lower the clearance height inside the barns, making them much trickier to fly through. The other switch, when moved to "A," causes more geese to appear in the sky, threatening the pilot with speed-robbing collisions.

There is a choice of three courses. *Junior Birdman* (variation #1) is a tune-up in which pilots may navigate over a set course until they have flown through ten barns. *Fly-by-Night* (variation #2) is again a set course, but this time there is a goal of fifteen barns. Finally *Master Barnstormer* (variation #3) presents a course that is different every time it is played, because the computer generates a fresh route for every new round of play. This time a complete run consists of twenty-five barns.

Strategy

Don't let the pretty graphics lull you into complacency. *Barnstorming* demands almost inhuman timing, the ability to dive or climb with pinpoint precision, and, at least in variations #1 and #2, a good memory for patterns.

Quick studies should be able to do very well in the games that utilize set courses simply by learning the spacing of the windmills and barns by rote. Memorizing the route will help you anticipate the next danger a split second before it appears at the right edge of the playfield.

Designer Steve Cartwright isn't letting players off quite that easily, even in games #1 and #2. Aside from the buildings on the ground there is also a gaggle of geese that can mess up even sure-handed fliers.

The faster the biplane goes, the more troublesome the geese become. If the throttle button is only pressed once during the game, to start the takeoff, then the aircraft will not catch up with the formation of birds.

The computer is instructed to generate birds every time the action button is pushed. The geese always fly in a set pattern at the beginning of each game. Should their forward speed be hindered by a collision with the biplane, however, the geese's pattern breaks up. The more the flying order of the birds is disrupted, the more troublesome they are likely to be for the pilot.

The problem: Fly slow enough to completely avoid the geese, and you won't compile a very inspiring score. The slow-speed method is somewhat useful, though, in practice runs to learn the course.

It is important to fly *with* the geese, not against

them. Once you've got the knack of speeding up and slowing down, it will be possible to gracefully glide through the flock without ruffling any feathers. It is always possible to avoid midair crashes, because the flock is never grouped so tightly that the tiny plane can't squeeze through safely.

The on-screen aircraft should attempt to maintain an average altitude about halfway up the screen. Holding this position makes it relatively easy to go up or down as required by the obstacles.

Staying in a central position becomes even more crucial, of course, when playing on a randomly produced route. In variation #3 it is possible for the pilot to face as many as three windmills and barns in a row. Notice that the total number of barns and towers remains constant from course to course, which can provide an added clue concerning what's ahead for those arcaders who can work simple math problems mentally while flying.

Video Frank Says:

Don't change speed and altitude without good reason. Those maneuvers just use up valuable time.

Such countdown artists gain a terrific edge as the game nears its end. Once all the windmills have been passed, it is possible to taxi near the ground and shoot through the remaining barns at top speed. If the pilot finishes off the barns first, then high-altitude may produce very nearly the same effect. Anything that gains a couple of precious seconds is worth considering.

All right, electronic fliers, put on that scarf, get out on the runway, and hit the sky—but, please, not the windmills!

Basketball

Ability Scores

	Basketball	*Basketball*
Grand Master	+ 12 pts.	+ 16 pts.
Master	+ 8 pts.	+ 10 pts.
Ace	+ 4 pts.	+ 6 pts.
Average	+ 2 pts.	+ 4 pts.
Novice	− 2 pts.	− 2 pts.

NOTE: Scores are based on one 4:00 play period with both sides using the same difficulty setting. If played handicapped (see "How It Plays"), raise rating one notch. If played with an advantage, lower rating one notch.

Point Values

Field Goal = 2 pts.
There are no foul shots in Atari *Basketball*.

How It Plays

Remember those frenetic one-on-one basketball games you used to get into after school? That's the kind of hoop action you'll find in Atari's *Basketball.*

Each team's single player—colored blue and green for easy identification—can range the full length and width of the trapezoidal court, guided with the joystick using the conventional compass directional system. The onscreen athlete automatically dribbles when in possession of the ball, and the character will always face the appropriate basket whether on offense or defense.

Press the action button to cause the player to stop dribbling and hold the ball. As long as the coach holds down the button, the player waves the ball in an arc running from just over his head to right in front of his chest. Releasing the button while the ball is raised high causes a long, hard shot. Letting it go when held low produces a soft, short heave.

The defender can steal by lining up exactly parallel to the man with the ball and then making contact with the bouncing sphere between dribbles. On defense pushing the action button will cause the hoopster to leap in the air and attempt to block a shot.

Basketball is played by one or two human coaches for a scale four minutes. Two such periods make a good tournament game. When the difficulty switch is in the "A" position, that team's on-screen representative will move up and down the hardwood floor more slowly than if the switch is left in the "B" position. Thus the difficulty adjustment can be used to handicap a superior arcader and keep the game exciting.

Strategy

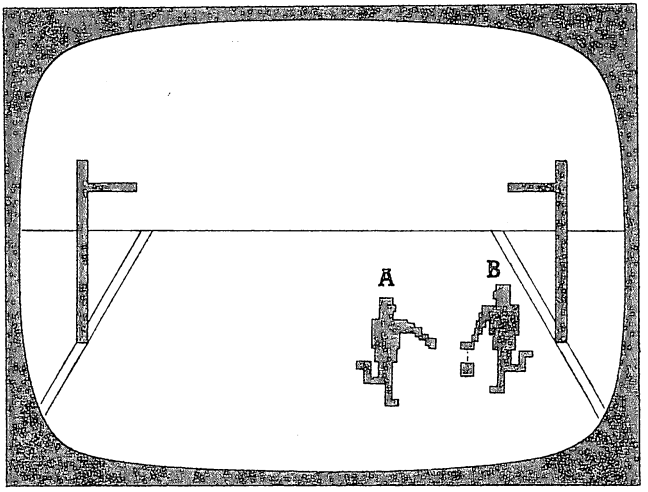
Those fancy playground moves, if sufficiently well remembered, should prove useful to arcaders hoping to establish hoop supremacy. With only one player per team the main idea is to set up for the best possible shot on offense while trying to stop your opponent from doing the same thing when the rival team has the ball.

For those whose background doesn't include a childhood punctuated by jumpers and fadeaway hooks, this philosophy boils down to one simple phrase, "the closer the better." A tap-in is always preferable to hoisting up a long one from the top of the key, because in a one-on-one game, the defender is going to haul down most of the rebounds. There's no "three-point play" in this game, so why risk a low-percentage shot when you can stuff it home from point-blank range.

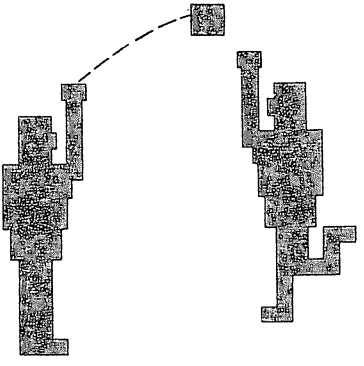
Just as in the real sport it's important to keep your man moving when he has the ball. The defender will be trying to steal it at any and every opportunity, and it's a lot harder for an electronic Michael Ray Richardson to precisely line up with a moving ballhandler than with a stationary one.

When your opponent has the ball, try for the steal before it gets past the center-court line. Once the other team penetrates your end of the floor, the best tactic is to drop back toward the basket. Keep your player between the potential shooter and the basket and don't get so carried away by your attempts to strip your foe of the ball that you end up giving him an unguarded shot.

Playing more conservatively in your own end has



Player A going for a steal.



Time your jump perfectly when shot-blocking.

several advantages. It not only encourages the other team to take those long-distance shots that generate those juicy rebounds, but it puts your defender in a better position to attempt to block a shot. Always remember that a block is only possible when the ball is still rising toward the hoop, so stand slightly closer to the man with the ball than to the basket.

Playing against the computer is a fascinating experience—and a very good way to practice for tilts against human opposition. When the computer-coached team builds a lead, the player takes a little vacation while you have the ball. When the score gets close, however, the robot player really gets the lead out and starts shadowing your athlete all over the court. (Novice players can learn a lot about the strategy of this game by watching the computer team when it gets up a full head of steam.)

One final similarity between Atari *Basketball* and those playground hoop contests of yesteryear: there's no referee. Bumping into your opponent when he has the ball will sometimes disrupt a carefully planned offensive strategy, and there's no one to call a foul.

Boxing

Ability Scores

	Boxing (1 player)	*Boxing* (2 players)
Grand Master	KO*	KO*
Master	KO	KO
Ace	+ 20 pts.	+ 20 pts.
Average	+ 10 pts.	+ 15 pts.
Novice	Decision Victory	Decision Victory

NOTE: If you fight handicapped (your difficulty switch on "A" with your opponent's on "B"), raise rating one notch. If the opponent is handicapped in this fashion, *lower* your rating one notch.

* = Holding the opponent to less than 30 punching pts.

Point Values

Long Jab: 1 pt.
Power Punch: 2 pts.
Knockout is achieved when player scores 100 pts. in a round.

How It Plays

The rules for *Boxing*, as in many of the earlier Activision cartridges, are relatively few and quite straightforward. The human manager controls one of two fighters, colored black and white for unmistakable identification, by using the joystick lever to move the man around the ring, seen in overhead perspective.

The game program itself takes a lot of the complexity out of the punching routine. To shoot out a jab just hit the action button when your pugilist is still some distance from his foe. A power punch can be landed using the same procedure when the two fighters are very close to each other. The machine automatically selects the appropriate punch, left or right, based on which hand can reach the desired target. Hold the button down to produce a flurry of combination blows.

Each round lasts two minutes and is measured by an on-screen clock. If no knockout occurs, a new round is started by hitting the reset switch on the VCS console.

In the solitaire version the computer-controlled boxer tries a lot harder when he's behind than when he has a comfortable lead. A greater number of punches will be thrown if the human manager positions his slugger inside rather than bombing from long range.

We recommend an eight-round bout, particularly for novices. More expert fighters might consider a ten- or even a fifteen-rounder.

Strategy

One test of the quality of a cartridge is how effectively strategies that succeed in the real-life sport can be transferred to the electronic version. In Activision's *Boxing,* the most successful players will be those who best succeed in adopting the rules of ring generalship to the television screen.

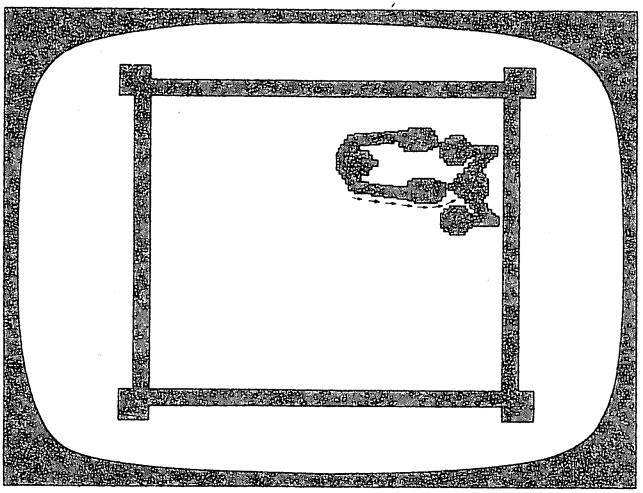
The single biggest divergence between the real ring and the electronic version is the total absence of the element of the single knockout punch. The only way to score a KO is by amassing 100 punching points in a single round.

Since the video boxers can't throw haymakers, it puts even greater stress on sound tactics. The opponent must be worn down bit by bit, not put away with one burst of thunder and lightning.

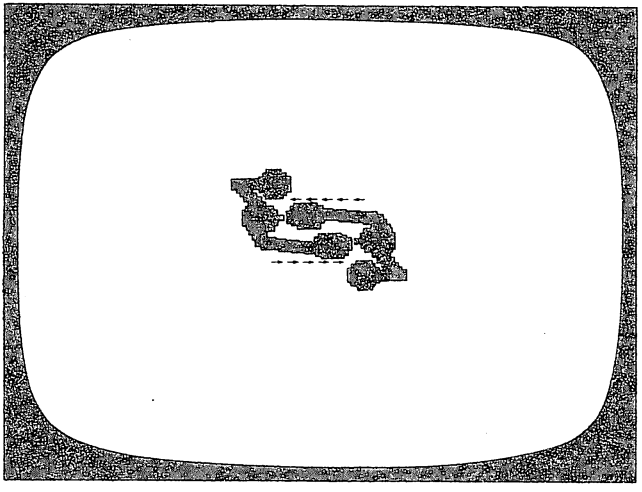
Two basic approaches are possible. You can fight aggressively or counterpunch. Players may well find it beneficial to switch between these roles from round to round. Try taking the fight to the other guy for a couple of stanzas, then go into a defensive shell while you rest.

And rest is something the wise arcader will include in his or her plans. Perhaps more than any other cartridge in the VCS library, *Boxing* is capable of giving even the heartiest arcader a good case of "videogamer's wrist." Although it may strike a few cynics as sheer affectation, wearing a wristband on the hand that works the joystick may be a sound idea. Even the most macho gamers will find themselves struggling by the fifteenth round.

When fighting aggressively, keep your fighter mov-



Pinning your opponent to the ropes.



Note that a fighter throwing a punch is vulnerable to a counter-punch.

ing constantly about the squared circle and attempt to whittle down the portion of the ring available to your opponent as much as possible. Don't let the other pugilist turn your man around. It may cost you a couple of precious seconds to reorient when you suddenly find your boxer throwing leather in the opposite direction.

Throw lots of punches and, naturally, try to keep boring forward between your rival's gloves. Move toward your opponent when throwing a punch, because every blow that lands will force him a step back.

Once you've got the other boxer near the ropes, try "Ping-Ponging" him. That is, bounce him into the strands with one blow, and then catch him with a solid shot on the rebound. Good players will be able to score a lot of points in a hurry by maintaining this position while pouring on the punches.

After fighting full tilt for several rounds in a row, it is advisable to spend the next round or so "cruising." There are several good defensive tricks. Holding the button down constantly extends the left arm in a purely defensive posture. It doesn't look so great, but it is surprisingly effective at keeping the rival fighter at bay.

On the other hand if the bout is being scored on a rounds system, it doesn't really matter if a round is lost by 4 points or 40. You may well want to concede the outcome of a round here and there by taking it easy and only doing enough to forestall a knockout.

You may also wish to try counterpunching, which can be used with either type of overall strategy. The philosophy in a nutshell is that every time your opponent throws a punch, he leaves himself vulnerable to a well-timed return blow. Here's how to make it work

for you: When the other boxer hurls his fist forward, move laterally. This gives you a chance to try to block the punch and puts you in a desirable position. When the opponent has fully extended his arm, throw your punch.

At worst this technique will keep the score close. When worked well it can put you in firm control of the pace of the fight—important in any videogame and vital in this one.

Stick and move, stick and move—and then stick and move some more. A flatfooted target is an easy target. The only way to pile up a winning margin of punch points is to hit the other guy more often than he hits you.

Boxing demands quick wits, good timing, and most of all a powerful wrist. Exercise may be the answer for some arcaders, but keeping a tight rein on the flow of the action is the best course over the long haul.

Breakout

Ability Scores

	Breakout	*Breakthru*
Grand Master	Both walls in 3 balls	Both walls in 1 ball
Master	Both walls	Both walls in 3 balls
Ace	1 wall	Both walls
Average	400 pts.	1 wall
Novice	200 pts.	375 pts.

NOTE: Using the small paddle ("A" difficulty) raises rating one notch.

Point Values

Red Brick: 7 pts.
Orange Brick: 7 pts.
Yellow Brick: 4 pts.
Green Brick: 4 pts.
Aqua Brick: 1 pt.
Blue Brick: 1 pt.

There are no bonuses or special targets.

How It Plays

Breakout (variations #1 through #4) and *Timed Breakout* (variations #5 through #8) both require the player to direct the horizontally mobile bat with the paddle. The field consists of six walls of colored bricks, which the arcader must eliminate one block at a time. The ball bounces off the bat, destroys a single brick, and rebounds to be hit again. Five balls comprise a game. A second wall appears after the first is demolished, though there is no increase in either difficulty or point value.

Breakthru (variations #9 through #12) is a blitzkrieg approach to the regulation game. Instead of deflecting back toward the bottom of the screen after striking just one brick, the ball plows straight through all six walls. This results in a contest that plays both faster and more easily than ordinary *Breakout*.

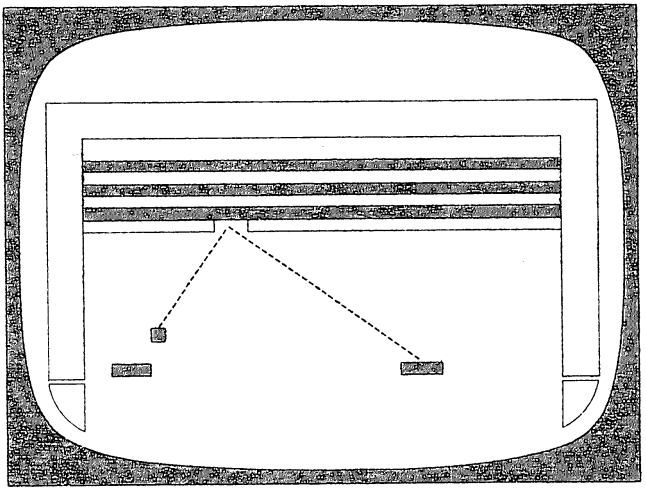
Multiple play is possible for up to four participants. Each one plays one ball at a time until all have completed a five-ball game.

Special options: Variations for *Breakout, Timed Breakout*, and *Breakthru* include the possibility of invisible bricks, steerable ball, and "catch."

Strategy

Breakout, a classic target shoot, lets the gamer blast away at a multicolored brickyard. A horizontal bat directs the ball at the rows of bricks located about three fourths of the way up the screen.

Gaining full control over the bat is the highest priority. This is no cinch, especially at the start. Your

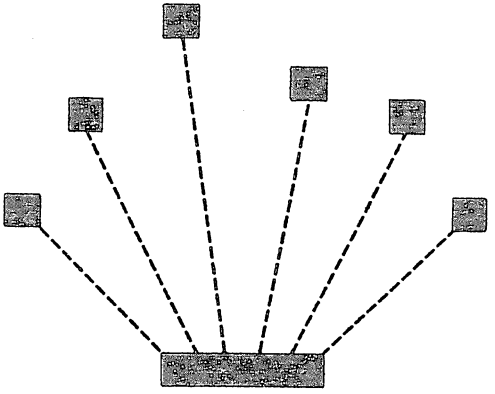


The ball penetrates the walls to achieve a "breakout."

on-screen weapon is actually composed of five segments, each of which sends the ball on a different flight path when struck. With time most arcaders can learn to guide shots virtually at will, at least up to a point. The problem is that the angles of deflection change after the third, seventh, and eleventh times bat meets ball, after which they reset and the cycle begins again. This prevents players from boldly guiding the ball into the extreme left or right corner of the wall time after time. To keep on top of these angle changes, remember to check them—and reaim—after every third shot. Learning how to play the angles properly, say *Breakout* masters, is the toughest aspect of the game.

Once armed with pinpoint aiming accuracy, it is possible to approach *Breakout*'s main strategic elements. The main goal should be to punch a pathway through all six walls into the vacant space between the topmost line of red bricks and the ceiling of the playfield. This is called a "breakout." Once the ball reaches that hallowed zone, it ricochets wildly, careening from brick to brick in an orgy of point-scoring.

Achieving a breakout confers another advantage. You don't have to hit the ball while it bounces around back there. Since the only time a ball can be lost is when it gets past the bat, this greatly reduces the opportunity for game-ending mistakes.



Paddle sections showing angles of deflection.

But a breakout requires some planning. Haphazard shots will peel away one layer of bricks at a time, and wear out most players long before they clear off the field. Try to cut a channel through the multilayered wall at either the extreme left or right. That will cause the ball to rattle around at the top of the playfield much longer than if you slice a path right through the middle.

The strategy for the *Timed Breakout* variations is more or less identical to that used in regular *Breakout*. High scores and quick play-times almost inevitably go hand-in-hand in this program.

The essential move remains creation of a breakthrough. Minimizing the number of times the ball travels from the bottom to the top of the screen and back again is bound to improve elapsed time. It's also true that the bricks in the front rows, while worth less, are the greatest danger. A ball that bounces off a low-lying block is much more likely to scoot past the bat.

Breakthru will surprise some players. It's hard to believe that two games—*Breakout* and *Breakthru*—

Video Frank Says:

Don't wiggle the bat during a post-breakout scoring run. The ball usually comes back to the bottom of the field at the same angle and to the same spot. Be there.

sharing the same field can play so differently. There's considerably less strategy needed in *Breakthru,* because the first shot will automatically open *two* channels through the wall.

For the need to create a breakout substitute a painstaking attention to the angles. The major difficulty arises when there are only a few bricks left on the screen, and the ball settles into a seemingly unbreakable pattern of bounces.

The *Breakthru* trap occurs because the ball's path is never altered by collision with a brick. This situation, as hypnotic as it is fatal, can be broken up in two ways.

The easiest is simple patience. Keep the ball in play and it will—honest!—eventually change direction. Of course this dramatically boosts the number of times the ball must be hit, increasing the odds of a miss.

The second method, which more aggressive arcaders will certainly prefer, involves jolting the ball out of its trance. Move the bat a short distance from where you expect the ball to intersect its plane of movement and then attempt to make contact while the bat is in motion.

Remember that in *Breakthru,* unlike *Breakout,* it is not desirable to keep the angle of the ball constant. The idea is to avoid covering the same patch of playfield more than once.

Championship Soccer

Ability Scores

	Soccer (var. #11)	*Soccer* (var. #41)
Grand Master	+ 6 goals	+ 5 goals
Master	+ 4 goals	+ 3 goals
Ace	+ 3 goals	+ 2 goals
Average	+ 1 goal	+ 1 goal
Novice	− 2 goals	− 1 goal

NOTE: If you play handicapped (your difficulty switch on "A" while your opponent's is on "B"), raise rating one notch. If the opponent is handicapped in this fashion, *lower* the rating one notch.

Point Values

Each goal: 1 pt.
There are no penalty shots in *Championship Soccer*.

How It Plays

The world's most popular spectator sport makes a fast-action game for one or two players. The coach uses the joystick to control a forward and two backs, represented by small rectangles colored red or blue, up and down a vertically scrolling playfield. These three men are arranged in a triangular formation and always travel as a cohesive unit.

The fourth man on the team is the goalie, who is at least partially positioned by the computer for both teams even in head-to-head play. The netminder automatically moves from side to side in front of the goal, following the flight of the ball. Pushing the joystick sharply to the left or right when the goalie is actually on the screen will cause the keeper to move much faster in that direction than he would if the matter is entirely left to the computer's discretion.

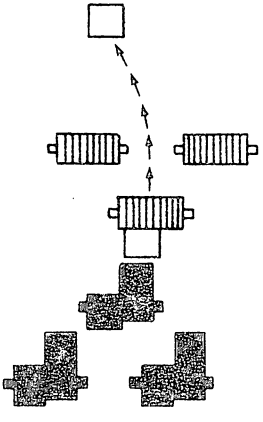
An on-screen athlete gains possession of the ball by touching it and then can bump it in any desired direction by pushing the joystick. A much faster and stronger toe kick is accomplished by hitting the action button.

Thanks to its fifty-four game variations *Championship Soccer* is almost infinitely variable. In one-player games the speed of the teams, the size of the goal mouth, and the presence of out-of-bounds penalties can be set. There are three choices for each factor. In solitaire versions it is possible to choose team speed, goal size, and the level of ability possessed by the robot squad, again with three selections for each element.

It is also possible to handicap either side by utilizing the difficulty switches on the VCS console. Put the lever in the "A" position to widen the goal mouth and slow down the running speed of the affected team's players.

Strategy

In order to put yourself in the proper psychological frame of mind for a rousing game of *Championship Soccer,* you might want to name your on-screen team "The Sharks." For just as surely as the killing machine of the ocean must move constantly to survive, so must the successful team in this wild and woolly sports simulation.



The best way to steal the ball is to meet it head-on and kick it behind the ball carrier.

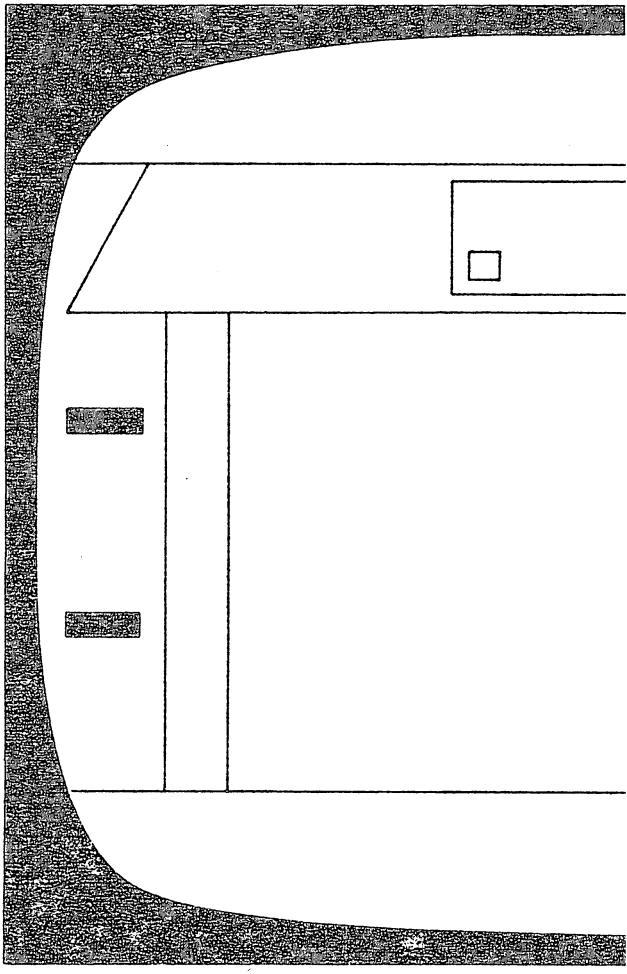
When two human coaches square off, strategy will vary from game to game. Tactics for each match-up must be developed in light of a particular opponent's strengths and weaknesses, his foibles and habits of play. What works well against one gamer may flop embarrassingly against another.

Play against the computer, however, is considerably less varied. This enables the coach to develop some general guidelines that can be applied, at least in part, when competing against another videogamer.

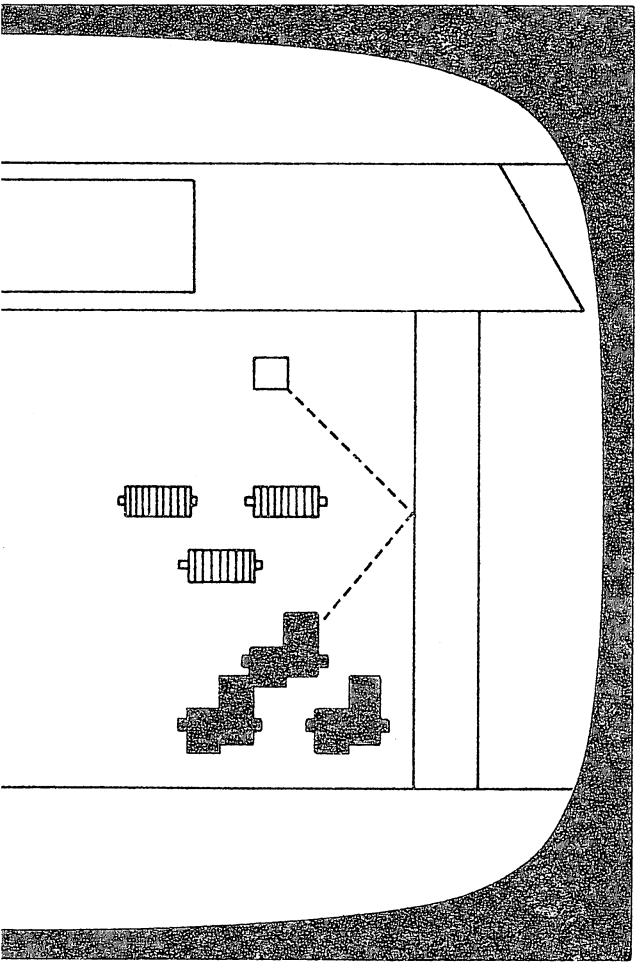
The most important thing to remember is that the defense is always faster than the offense in all of this cartridge's fifty-four variations. It therefore requires more than a chugging straight-ahead dribbling style to maintain possession. Good teams will dodge, weave, and pass the ball constantly from man to man, moving toward the goal the whole time.

Once the goal scrolls onto the playfield, make sure you always take an angled shot rather than trying a blast from the front, no matter how close you manage to work the ball to the net. The computer-controlled goalie will always be positioned directly parallel with the center-forward of the rival team so that he can always stop those unsubtle direct kicks. An angled shot or a last-second deflection by a player are the only shots apt to beat a robot goalie, especially when the computer is adjusted to play at a high level of skill.

Always remember that one-player versions of *Championship Soccer* are played without referee or linesman. This has the effect of turning the sidelines and goal lines into solid objects—like the "dasher boards" found in indoor soccer. This gives the clever player an additional element with which to work. Bounces passed off the wall will be deflected back to the same man.



Use the "solid" boards to pass around the defense.



Use the boards like a fifth player, drawing the other team toward yours. Fire one into the boards, then zip downfield to snare the rebound and break toward the goal.

Make the most of your team's speed on defense by moving in a straight line as much as possible. Don't waste precious time by sliding laterally to attempt to strip the ball from the other team. It isn't likely to work, and it could leave your opponent with a clear path to the goal. And the netminder is surprisingly ineffective in such situations. If the computer-coached team gets such a breakaway, a score is almost certain at the higher skill levels.

The ball is much easier to steal if you get right in front of the booter who has it. Simply kick it away, or pick the forward's pocket by snagging it as you move away from your own goal at an angle.

Get the ball away from the goal mouth at all costs. Once the rival side gets off a shot, they will be in a position to set up deep in your territory, even if your keeper stops the first attempt. Take advantage of the fact that the rival forward will stand nose-to-nose with your goalie as long as he still has the ball by setting up so as to line up your inside defenseman with your rival's outside defenseman. This will limit the other team's lateral movement enough to give you an edge. Draw the opponents toward the wrong direction using your goalie, then run him the other way quickly. This should give you the chance to make an unmolested pass to your unguarded forward.

This raises another point: There's no penalty for delay-of-game in *Championship Soccer.* Your goalie can hold the ball as long as you like, and the clock will continue to run. To obviously "eat" the ball at this

point would clearly be cheating and, hence, detestable. Still, you don't want to rush the play and perhaps blow a carefully built lead. If you happen to kill a few extra seconds in the process, who's counting?

Variation #53 is probably the most challenging of the solitaire contests. Once you are consistently beating the computer's squad at this level, you'll truly deserve the fireworks display that salutes the winner at the end of each game.

Circus Atari

Ability Scores

	Breakout Circus (var. # 1)	*Breakthru Circus* (var. # 3)	*Breakout Circus* (var. # 5)
Grand Master	10,000 pts.	8,000 pts.	12,000 pts.
Master	3,000 pts.	2,500 pts.	3,500 pts.
Ace	**1,000 pts.**	**800 pts.**	**1,200 pts.**
Average	500 pts.	400 pts.	600 pts.
Novice	300 pts.	200 pts.	350 pts.

NOTE: Using the "A" difficulty raises the rating one notch.

Point Values

White Balloon: 2 pts. **Blue Balloon:** 5 pts.

Red Balloon: 10 pts. **Each Bounce:** 1 pt.

Bonus Scoring: Clearing White Balloon Row—20 pts.

Clearing Blue Balloon Row—50 pts.

Clearing Red Balloon Row—100 pts.

NOTE: In variations in which individual lines of balloons do not reset, the bonus for clearing an entire playfield is 170 pts.

How It Plays

Breakout Circus (variations #1, #2, #5, and #6) is an offshoot of the classic ball-and-paddle contest, but there's one huge difference. The three rows of square colored "balloons" must be burst by the pair of clowns on the teeter-totter. A clown appears at one of the side edges of the playfield and launches himself into the air. The player then positions the teeter-totter so that the on-screen character lands on the free end, propelling his teammate toward the balloons at the top of the screen. The closer the clown lands to the end of the board, the more leverage he expects, and therefore the higher his cohort will soar. Pushing the action button allows the player to position the waiting clown at either end of the teeter-totter, a great aid in aiming the leaps.

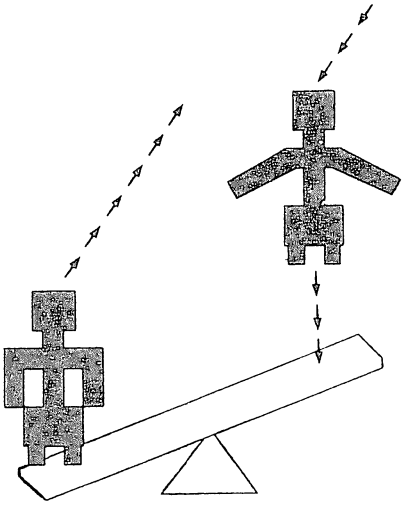
Variations #1 and #2 are similar, except that the latter has extra barriers just below the rows of balloons. In both, eliminating a row of targets completely causes that row to reset. Variations #1 and #6 are also similar in that all three rows must be removed before a reset occurs. The difference is that variation #6 includes those pesky barriers.

Breakthru Circus (variations #3 and #4) is a souped-up edition of the basic game. Instead of rebounding after breaking a balloon the clown continues to travel in a vaguely horizontal direction.

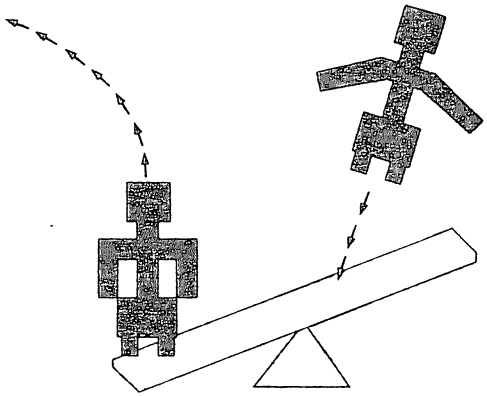
Two-Player Circus (variations #7 and #8) lets two arcaders compete against each other, working to burst the balloons in the same wall. Variation #8 adds the barriers.

Strategy

Although a few black-hearted souls may play *Circus Atari* just so they can watch one of the tiny clowns make a headfirst landing, keeping the little acrobats flying through the air with the greatest of ease is the object most people will want to pursue. Pulling off this balancing act with any consistency—say, two hundred times in a row—requires precision and finesse. Those who live by the arcading philosophy "crash and bash" will probably find *Circus Atari* a frustrating experience indeed.



Land on the edge of the teeter-totter to send the other clown in the direction shown.



Landing closer to the fulcrum sends the clown in the opposite direction.

In the versions of the game that reset each row of balloons individually after it is cleared, the smart move is to show a little selectivity. Each balloon in the top (red) row is worth five times as much as one of the white floaters, so they should be your main concern. Since wiping out the red row is also the only way to get a "bonus" clown and extend the game, this group of balloons is actually the key to the whole game.

The idea is to thin out the 2-point targets enough so that when the clown sails toward the top of the playfield, nothing stands between your on-screen representative and all those ruby-colored beauties. The

middle (blue) row pretty much takes care of itself, disappearing as a natural by-product of the assault on the red balloons.

Those 10-point red balloons are still very important even in the versions of *Circus Atari* that don't reset any one row until all three are eliminated, but somewhat less crucial relative to other point-scoring targets. That's because you can't rack up lots of 100-point bonuses for repeatedly clearing the red wall. In these versions just work at clearing whatever targets present themselves.

The fewer times a clown has to make one of those tricky landings on the teeter-totter, the less likely a game-ending crash becomes. Obviously the easiest way to avoid this is to make the balloon-buster explode as many of the targets as possible each time he leaps off the board.

Since the clown can sometimes bounce along from balloon to balloon on a horizontal row before returning to earth, anything that promotes this event should be

Video Frank Says:

Make one clown land as close to the end of the board as possible to send the other one into red balloon-land.

encouraged. In general the best way to collect several targets on each pass is to make sure, by judicious use of the action button, that the clown is leaping in the opposite direction to the one in which the target-row is traveling. This gives the clown a good chance of having a second balloon move into his path after he breaks the first and before the descent starts.

Dodge 'Em

Ability Scores

	Dodge 'Em (var. #1)
Grand Master	3,000 pts.
Master	2,000 pts.
Ace	1,000 pts.
Average	500 pts.
Novice	100 pts.

Point Values

Each Dot: 1 pt.
Bonus: Clearing a wall (five walls per heat is maximum): 8 pts.

How It Plays

The *Dodge 'Em* cartridge includes one solitaire and a pair of two-player contests. In the one-player mode the player steers a point-scoring auto that tries to pick up the dots that line the course, while the computer manipulates a crash car that is always attempting to cause a round-ending collision. Game #2 is basically the same, except that two arcaders take turns trying to pick up the dots. The third variation offers direct head-to-head confrontation; human players alternately direct the scoring and crash cars. In all three cases three crashes—or "heats"—constitute a complete game of *Dodge 'Em*.

In all games the arcader's car will automatically move around the four-lane track in a counterclockwise fashion. To steer the car a driver merely pushes the joystick in the desired direction. In other words move the stick left if you want to initiate movement toward the left side of the screen.

Pushing the action button is like slamming your foot on the gas pedal. The car speeds up for as long as the button is held down. This increased rate of movement will, however, decrease maneuverability. You can change two lanes at a time while running at a normal speed, but only one if the action button is providing that extra boost.

The blue, computer-controlled auto zooms along the track in a clockwise direction. When the right-hand difficulty switch is in the "B" position, the robot vehicle starts right next to the arcader's machine. On "A" the computer crash car will begin from some random point on the track. If the human driver suc-

cessfully scoops up all the dots twice during the same heat, there will be *two* crash cars looking to cause mayhem.

The left-hand difficulty switch affects the speed at which the crash car, or cars, travels. If the level is in position "B," the robot auto will always move at normal speed. In the "A" position crash cars travel at twice normal speed after the first and third sets of bonus points are awarded for clearing the playfield.

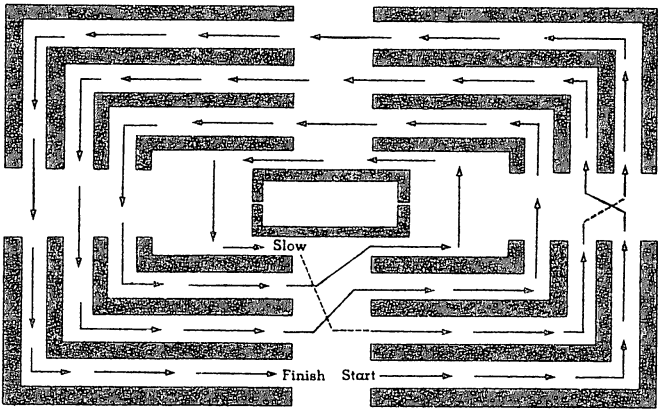
Strategy

The maze playfield and dot-eating automobiles of *Dodge 'Em* are clearly precursors of similar elements found in *Pac-Man*. Not surprisingly, the earlier game is as susceptible to pattern analysis as its more famous descendant.

Once a player learns the pattern—or patterns—in a videogame such as this, it can be played until the old hands can't stand to grip the joystick any more. Not that the game is a complete cinch once the pattern is mastered. The proper execution of the pattern, especially when more than one pattern is involved, can sometimes prove even more challenging than ordinary gaming.

In game #1 (difficulty "B" on both sides) the player participates in three scenarios. In the first round the gamer faces a "dumb" computer-controlled jam car. It is called "dumb" because the crash car does not respond in any perceptible way to the player's moves.

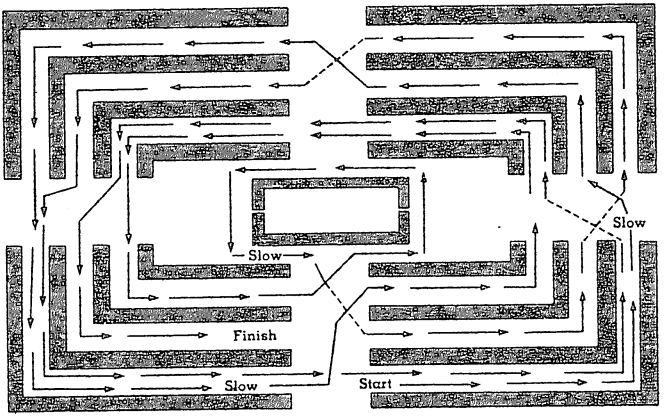
The jam car in the second round is "smart" and can only be overcome with a far more devious pattern. Beginning in the third round, the human driver must



Pattern for scenario #1 and for all "double-jam car" versions. Travel at full speed except where noted.

contend with a pair of computer-directed crash cars. Ironically it is easier to elude two cars than one because of their slow speed. The number of two-car rounds in any given heat is chosen at random, so the gamer may see up to six repetitions of the two-car tandem before the cycle restarts from the beginning.

Before getting to the actual patterns, it's necessary to do a little labeling. Let's designate the outermost track, the one on which the human-controlled car starts, as corridor #1. The parallel paths are numbered



Pattern for all second rounds. Travel at full speed except where noted.

in sequence, working toward the center, so that the innermost channel is corridor #4. Lane switch points in each corridor will be identified according to the edge of the playfield on which they are located—north, south, east, and west.

Pattern "A" is employed during the first round of a heat and in all two-crash-car situations. Pattern "B" is utilized only during the second round of each heat.

Pattern "A." Begin with your finger firmly planted on the action button and take the entire game at top speed—except at the one key point at which the driver will want to slow down.

Play begins with the point-scoring auto situated at exit "S" in corridor #1. Leave corridor #1 at exit "E," and roar down corridor #2 until you reach exit "S." Once there move into lane #3 and clear out the entire corridor. At exit "S" swerve into corridor #4 and empty that one of dots too. When your car has returned to exit "S," slow down and move two lanes over into corridor #2. Stay in this path until exit "E," at which point you should steer into corridor #1 and finish off the last section of the field.

Pattern "B." This one is complicated by the fact that the VCS-directed jam car responds to the initial turn at exit "E" by switching to corridor #2. Counter this by arcing back into corridor #1 at exit "N." Stay in that track until you approach the "S" exit. Slow down and swerve two lanes into corridor #3. Circle the screen in this channel and then, at exit "S," move into corridor #4. After clearing it out slow down at exit "S" and make the two-lane jump to corridor #2. Move into corridor #1 when your car reaches exit "W." Remain in that lane until the racer gets to exit "E." Reduce speed and slide over into corridor #3. Turn left onto corridor #2 at exit "W" and clear the last of the dots.

If pattern play begins to bore, there are many other variations on the *Dodge 'Em* cartridge. Or you can choose random placement of the jam car by moving the difficulty switch to "A." Or use the other switch to double the speed of the crash car, giving it enough extra muscle to foil just about any simple move the point-scoring car might make.

Fishing Derby

Ability Scores

	Fishing Derby (var. #1)	*Fishing Derby* (var. #2)
Grand Master	+ 30 pts.	+ 25 pts.
Master	+ 20 pts.	+ 15 pts.
Ace	+ 15 pts.	+ 10 pts.
Average	+ 5 pts.	± 5 pts.
Novice	− 5 pts.	− 8 pts.

NOTE: The top three rankings may only be achieved by players who win the game with the maximum score of 99 points.

Point Values

Fish in First Two Rows: 2 pts.
Fish in Rows 3–4: 4 pts.
Fish in Rows 5–6: 6 pts.

How It Plays

Two electronic fishermen are, in the words of the late Otis Redding, sittin' by the dock of the bay. Each has a line dangling in the water, which is choked with fish swimming back and forth between the two piers.

Moving the joystick left and right positions the line at the desired distance from the dock, while moving the stick north and south will raise and lower the hook in the water. A fish bites when the hook is near its mouth (at least it does when the "B" difficulty is in use). It can be snagged either by bringing the line to the surface slowly using the stick or by rapidly reeling it in by pressing the action button.

As every angler already knows, fishing wouldn't be much fun if it were quite that easy. A shark lives deep beneath the surface of the water, and the inhuman hunter-killer will make a tasty meal of any fisherman's prize that isn't pulled out of the water quickly enough.

The fish are arrayed in clearly defined rows. The schools swimming closer to the surface are worth correspondingly fewer points. You have to go deep to land the big ones.

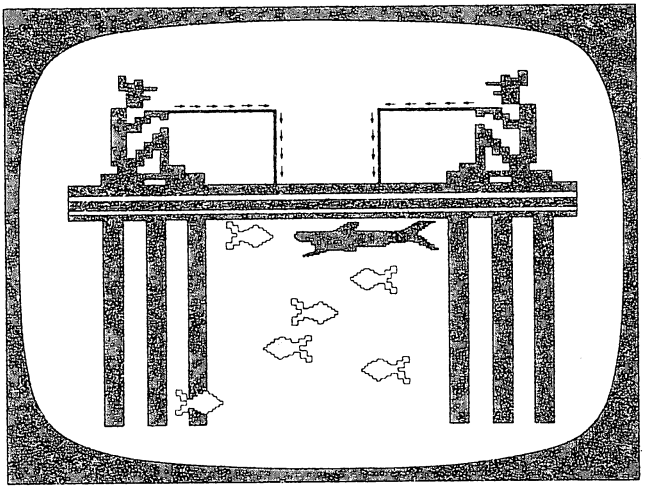
The difficulty switch can be used to handicap one participant in a two-player game or to give a newcomer a chance against the computer in the solitaire version. Sliding the switch to the "A" setting requires the arcader to lay the hook much nearer the target in order to get the fish to take it.

Players continue to haul fish out of the water one at a time until time runs out or one arcader amasses 99 points.

Strategy

Don't become agitated by the on-screen clock's countdown. *Fishing Derby* may be a race against time, but it hardly qualifies as a sprint. The pace of the game is actually a bit leisurely, if truth be known, not at all similar to the blazing action found in such other clock games as *Air-Sea Battle*.

The most difficult portion of the game is not catching the fish but landing them. To hook a prize just position the end of the line so that the video trout will be swimming right over it. Just determine in which direction the fish you seek is heading and lay out that oh-so-tempting hook. Anglers can also experiment with

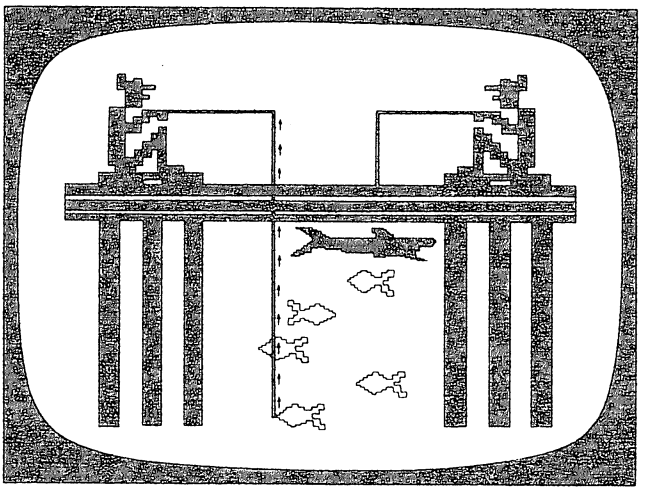


The pole extends horizontally, and the line drops vertically.

"trolling," or gently dragging the hook through the clear blue water right at the mouth level of the target row of fish.

Since the time needed to raise and lower the line is virtually inconsequential compared to the number of seconds burned up by other activities necessary to the game, there's no reason to bother with the two-pound (2 point) fish residing in the two upper channels. Any extra time it takes to go deeper will be more than made up by the greater weight of the haul.

Landing the fish is definitely the tricky part, thanks to the presence of the hungry shark who also calls the depths his home. Electronic Izaak Waltons will want to practice reeling 'em in over and over again, otherwise "Jaws" will eat the catch as fast as it's hooked.



Reel in fish when the shark is swimming away.

The shark isn't stupid. When a very good arcader is matched against a novice, the aquatic hunter will quickly sniff out the tyro and begin hanging around the weaker player's dock. Feed the shark once, and you'll never get rid of it.

Therefore it's vital to get off to a flying start in *Fishing Derby*—and even more important to be ready to take full advantage of your opponent's mistakes. Once you've hooked a fish, bring it up to just below the shark's current swimming stratum and hold it at that level. If the shark is prowling the other end of the channel, reel it in the rest of the way without even a pause. Remember that even to brush the tail of the shark with your freshly caught fish will cause the monster to turn around like lightning and gobble it up.

The importance of ignoring the low-scoring fish cannot be overstated. It is even a good idea to intentionally avoid such scrawny specimens as you lower the line into the water. You don't want them biting the

Video Frank Says:

Only go for sure things at the beginning. Once the shark gets interested in what the other fisher is doing, you'll have an easier time.

bait by accident and wasting precious time that could be used to land the big ones.

The bottom line is that the challenging portion of the cartridge is landing the fish, not just catching them. So why go through all that trouble for a measly couple of points when the fish at the lowest levels are worth three times as much?

Good luck—and good fishing!

Home Run

Ability Scores

	Home Run (var. #5)	*Home Run* (var. #6)	*Home Run* (var. #7)	*Home Run* (var. #8)
Grand Master	+ 10 runs	+ 9 runs	+ 8 runs	+ 6 runs
Master	+ 8 runs	+ 7 runs	+ 6 runs	+ 4 runs
Ace	+ 5 runs	+ 4 runs	+ 3 runs	+ 3 runs
Average	+ 3 runs	+ 2 runs	+ 2 runs	+ 2 runs
Novice	+ 1 run	+ 1 run	− 1 run	− 2 runs

Point Values

1 run: 1 pt.

NOTE: There are no bonuses or other nonstandard scoring features in this game.

How It Plays

This has the honor of being the only programmable videogame cartridge that allows an arcader to play a solitaire electronic version of the national pastime. *Home Run* offers eight variations, evenly divided between one-and two-player modes.

Games #1 and #3 have only one fielder/pitcher per team, games #2 and #6 provide two glovemen, games #3 and #7 give managers three men arrayed like a strip of paper dolls, and the remaining pair spread the trio of fielders more widely across the diamond.

The rules mirror the regulations of standard baseball as much as possible. Games consist of nine innings with three outs per side in each, to cite one instance, and batters get the usual three strikes and four balls. Jamming a baseball program into 2K of memory forced the designers to prune away many elements of real sport. There are lots of factors that worry Earl Weaver that won't lose managers in *Home Run* a minute's sleep.

Arcaders swing the bat for the player at the plate by pushing the joystick in any direction. Pushing the action button will cause runners (and the batter) to stop at the next base they reach. There is no mechanism for altering the force of the swing or laying down a bunt.

The pitcher controls the ball by manipulating the joystick. Pushing it forward puts extra heat on the throw, while throttling back fashions a change-up. Left or right moves on the stick cause the ball to curve in those directions.

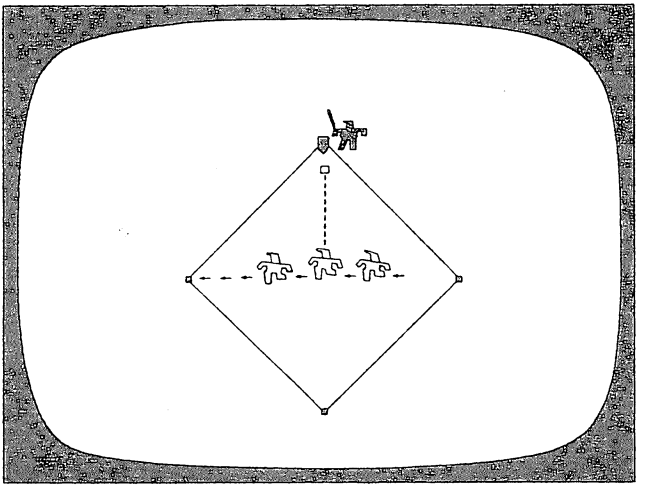
After the batter hits a pitched ball, the defensive manager's joystick switches to control of the fielder or

fielders. The method used is a simple compass rose, and all fielders move in unison.

There are no fly balls in *Home Run*. Each batter or runner, therefore, must be retired by having a fielder touch the ball and then run it over to the appropriate base (or make a tag play).

Strategy

Home Run is so pared down from the original sport that it only barely qualifies as a baseball simulation.



After the pitch is thrown, sweep fielders toward first base to attempt to catch the ball and tag the base in one move.

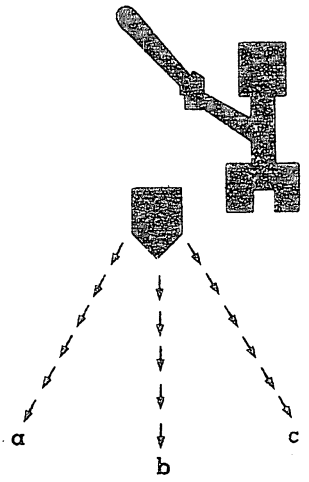
With its small number of players in the field and its absorption in the battle between pitcher and hitter, it might more accurately be called "Video Stickball."

The ability to throw a wide assortment of pitches and still get the horsehide over the plate is a highly useful talent in this cartridge. Some managers just smoke the ball straight down the pipe. Throwing pure heat allows such players to concentrate on defense, the correct positioning of the fielders. Arcaders who pursue this tactic claim that pitchers who control the ball up to the instant it smacks into the catcher's mitt may lose an instant when control changes from the pitcher to the fielders.

This is true. Yet it's also true that really good players will, with experience, learn to overcome the momentary hesitation. Also any pitch that can't be hit doesn't have to be fielded. Skilled players should be able to strike out at least two batsmen an inning. We advocate sticking with the curves and change-ups, while leaving fastballs for folks like Goose Gossage.

Throwing the "six o'clock" pitch—a straight fastball—gives the long-term advantage to the batter. Once the hitter refines his timing, he will be able to place the ball almost anywhere on the field, depending on whether the swing is late or early. Throwing nothing but fastballs will, with men on bases, give the batter an excellent chance of hitting behind the runner. In *Home Run* this can prove a decisive advantage.

It's much better to keep the hitter guessing. Throw the occasional heater to keep the hitter honest, but don't depend on the fastball. Test the batter to see what kind of stuff makes him swing. After throwing a few hard, outside breaking balls, slip in a fastball and then toss an inside curve.



Swing late (a) to put the ball in the opposite field. Hit the ball dead-center (b) to send the ball over second base. Swing early (c) to pull the ball over third base.

The greatest pitching weapon is, however, the change-of-speed throw. Since the batter depends on timing to place his shots, varying the speed of your pitches will mess up his internal stopwatch.

Throwing the change-up requires a little study. Start with an unadorned fastball, then return the joystick to the neutral position. Finally, bring the ball across the plate at top speed. This produces a pitch that starts toward home like a screaming eagle, dies in mid-flight, and then roars past the batter like a locomotive. Even hitters who manage to make contact with such a toss

will only rarely get a solid piece of the ball, let alone place the hit in a specific location on the field.

As previously noted, timing is the crucial factor for hitters. Have patience and don't swing at everything. The idea is to make the hurler throw strikes. It's your best defense against having to contend with the repertoire of crazy pitches mentioned earlier in this section. Once the man on the mound gets behind in the count, he'll have to give you something decent to hit.

To hit the ball to right field, swing late. Bringing the bat around a little ahead of the ball will enable you to pull it. Attempt to punch it just over the third baseman's head into left. Never hit straight away, because the pitcher is in perfect position to handle anything that goes up the middle of the diamond.

Always try to hit behind any runners. That way your opponent won't have an easy time making a force play and erasing your lead man.

And, of course, always keep your eye on the ball.

Video Frank Says:

Take a lot of pitches. When the manager gets bored with all that curve-and change-up junk, he'll end up giving you a fat one right down the middle.

Ice Hockey

Ability Scores

	Ice Hockey (Var. #1)
Grand Master	+ 7 goals
Master	+ 5 goals
Ace	+ 3 goals
Average	+ 1 goal
Novice	– goal

Point Value

Scoring is exactly the same as in the real sport.
1 goal: 1 pt.

NOTE: There are no penalties and thus no penalty shots or shorthanded situations.

How It Plays

Each coach employs the joystick to direct a team composed of two skaters. One of each side's on-screen athletes represents a free-ranging forward, while the other assumes the role of goalie. The joystick always affects the man who is physically closest to the puck, switching control automatically from one iceman to the other. The teams are colored blue and yellow, so the human coaches always know who's who even when everyone is digging in the corner for the puck.

Getting possession of the puck is as easy as maneuvering one of your skaters close enough to touch it with his stick. It then begins to move back and forth along the blade, but it will stay with the man pushing it along unless a defender wheels up and pokes it away. A *click* sounds to let everyone know when a player has achieved control of the precious piece of rubber.

Push the action button to fire a shot on goal. The angle of the slapper depends on the position on the shooter's blade at the time the button is pressed. There are thirty-two possible angles. The puck will go to the extreme left, for example, when it is on the part of the blade closest to the shooter at the time it is triggered. Shots may only be directed toward the rival goal.

On defense the coach may elect to have his player use the stick to check the guy with the puck. Since there is no official to call penalties, such aggressive tactics are perfectly within the rules.

Passing is done the same way as taking a shot. The only difference is that the target is the team's other skater rather than the opponent's net.

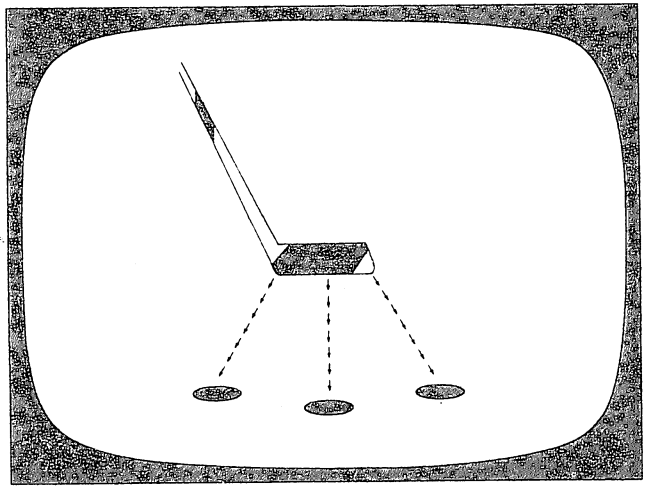
There are four game variations—two head-to-head contests and a pair that can be played solo. The chief

difference is that two speed up the on-ice action, while the other pair use a slower pace. The difficulty switch can also be used to handicap one team by setting it to the "A" position.

Strategy

As in all good sports simulations Activision's *Ice Hockey* offers would-be coaches a lot of scope for developing convoluted strategies. In order to better organize the information affecting play of this cartridge, we've isolated each phase of the game for separate consideration.

Shooting the puck accurately is the prime challenge when your team is on the offense. Even the most gifted



Angles of deflection from the stick.

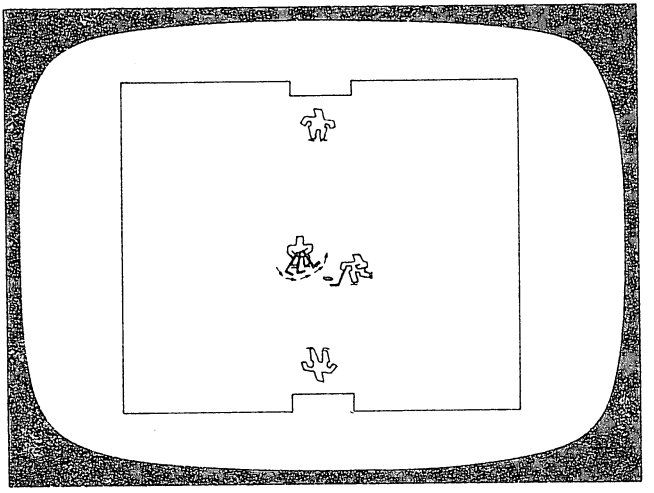
gamers will have to practice before they can count on the puck traveling where they intend with any degree of consistency.

To recap the rules a bit, the puck travels at an angle that corresponds to its position on the blade of the stick when the action button is pressed. If the shooter has the puck on the center portion of the blade, it will zoom straight ahead, while a blast from the heel of the stick will send it sharply to the left. Learn the thirty-two shot/pass angles through practice and repetition; it's the only way.

The forward is the only equal team member who should be doing any significant amount of puck-carrying. The goalie/defenseman should generally be used only to clear the puck away from the mouth of the goal and send it ahead to the forward.

Just as in the real sport, to master the boards is a vital part of *Ice Hockey*. The boards can function as a third player for coaches who are wise enough to exploit them to the fullest. Fake out defenseman when your forward is carrying the puck near the boards. As the defender closes in for a steal, slam the puck off the boards at a wide angle. Then just skate around the opposition and retrieve the pass. This tactic will often allow your forward to break toward the goal unmolested for an easy point.

The old Philadelphia Flyers would love this game. There's no referee to keep the defender from using sticks on the other team rather than the puck. Feel perfectly free to slash, hack, and trip the rival puck-handler. Too much gooning it up can hurt the offending player, however, so pick your spots. Controlled skating, good puck control, pinpoint passing, and accurate shooting are still the prime requisites for success—not the ability to decapitate.

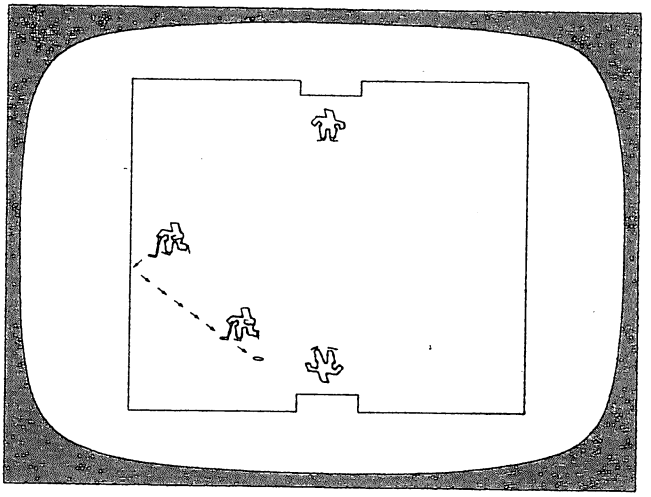


To "sweep check," swing your stick to intercept the puck from the opposing player.

There's nothing wrong with tripping a too-conscientious defenseman, but the coach who has his charges constantly slashing and spearing will only alert his foe—and it's no harder for him to attack your men than it is for you to attack his.

A tripped player falls to the ice and remains there for a few seconds. During this period the remaining player on the team will get full freedom to roam the length and breadth of the rink.

Exercise extreme caution when the man still standing is the defender. Moving him all the way up ice will only leave him out of position if you lose control of the



Pass off the solid boards to get around opposing players.

puck. And that will give your rival a no-risk empty net goal if he gets hold of the puck.

On defense there are a couple of good ways to steal the puck. You can simply sneak up and take it right off the carrier's blade, or you may want to try the gentle art of sweep-checking—using your stick to upend the puck-carrier.

Sweep-checking has a major advantage over playing the body: Your man isn't close enough for the other guy to retaliate if you miss. Also it will be easier to see where the puck is situated along the puck-carrier's blade, since you won't be all tangled up with him.

Shot-blocking works reasonably well, but it demands a practiced eye. When the action is taking place deep in your own portion of the rink, however, it is reasonably safe to assume that any shot is going to head directly for your net. This puts your defenseman in the best possible position for intercepting a shot on the way to its destination.

In goaltending never leave the crease in front of the goal. Never! Stand up and dare the shooter to pound it past you. Moving out does cut down on the forward's angle, but it also incurs terrible risks. The shooter may deke around you—a prime worry for novice defenders—or, even worse, run right over you when your team's goalie is out in the open.

Clear the puck out of the crease—or out of the zone entirely, if possible—immediately. If possible pass toward your forward, who will normally hang back around the blue line, just waiting for a breakaway. A crisp pass at this point may allow your forward to go one-on-one with the opposition's netminder.

The hints given so far apply primarily to the variations in which events move at regular speed. Games #2 and #4 provide a much slicker ice surface, and the puck will tend to slide along the rink until it strikes some solid object.

The constant movement of *Ice Hockey* gives the cartridge something of the feel of an out-and-out arcade-action contest. Once you've learned to control the movement of the skaters and accurately judge the angle at which the puck will leave a stick, it should be possible to give a fair imitation of the Great Gretsky on your TV screen.

Kaboom!

Ability Scores

	Kaboom! (var. #1)
Grand Master	30,000 pts.
Master	3,000 pts.
Ace	1,500 pts.
Average	500 pts.
Novice	100 pts.

Point Values

Group #1 Bomb: 1 pt.
Group #2 Bomb: 2 pts.
Group #3 Bomb: 3 pts.
Group #4 Bomb: 4 pts.
Group #5 Bomb: 5 pts.
Group #6 Bomb: 6 pts.
Group #7 Bomb: 7 pts.
Group #8 Bomb: 8 pts.

How It Plays

Unlike the majority of games in which participants receive three or four "lives," *Kaboom!* provides a trio of buckets for each player right at the start of the action. The paddle controller moves the buckets, stacked one tub above the next, back and forth at the base of a high wall. A mad bomber located near the top of the screen impishly tosses sizzling incendiary devices which the arcader must douse by catching them in the troughs.

The bombs are launched in volleys, each group a little bigger than the next. Group #1 has only 10 explosive charges, for instance, while group #8 150 of them. At the same time, there is an increase in the speed at which the bomber drops his little presents from group to group.

Any bucket on the screen may be used to catch a bomb. A player can get a replacement tub every time 1,000 points are tallied, but more than three can never be held simultaneously.

If a player fails to catch a bomb, it detonates in a chain reaction that ignites every other explosive device on the playfield. The machine then resumes action with the bomb group one level easier than the one at which the blow up occurred. The player must then catch one half the number of bombs usually contained in the group before advancing once more to the one previously uncompleted.

The difficulty switch has the effect of halving the width of the buckets. This makes it a lot tougher to snag those packages of flaming death.

Strategy

Some games provide more opportunity for strategic planning than others. A few titles embody vast tactical structures that must be studied like chess, many others can be mastered through patient practice and the application of a few tips, and a select few are clearly the arena for testing the hand-eye coordination of even the most quick-handed arcade aces.

Kaboom! is unmistakably the third type. Thinking is almost a burden at times in this often grueling contest. The great bomb-catchers respond from instinct.

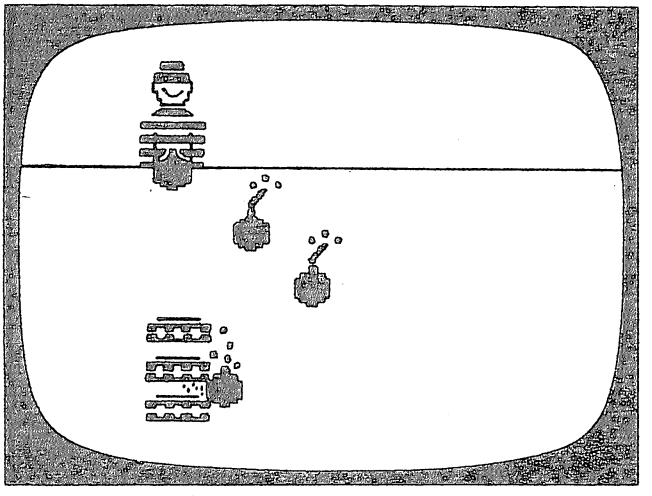
The key to *Kaboom!* lies in the catchphrase "Go with the flow!" Let your dexterity work its magic while your brain focuses on memorizing the drop-pattern for each of the groups of bombs. Sweep the pile of buckets smoothly across the lower part of the screen, catching the explosives as they fall toward your position.

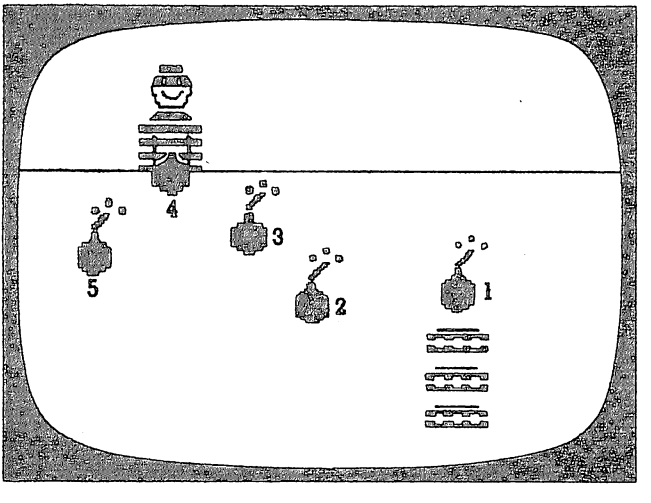
In some ways *Kaboom!* can be thought of as a variation on a driving game. Look at the stream of bombs as a road and the stack of buckets as the vehicle which must be driven over it.

Those who can't steal the shirt off their neighbor's back while he still has on his coat need not despair. *Kaboom!* superstars are essentially made, not born. Assiduous practice is mandatory.

Memorizing the pattern of bombs sure can't hurt. Anticipating the rapid reversals in direction that are frequently necessary will greatly improve anyone's chances of catching the bombs successfully.

It is also a lot easier to play this videogame with a





This pattern of falling bombs is repeated twice for the first ten bombs.

full supply of tubs than when you've only got two or even—gulp!—just one. The lowest bucket is ideal for catching bombs mere inches from the ground. Worry more about the bombs that have already fallen below the level of your uppermost tub, not the incendiary gizmos the bomber has only just released.

Since getting that extra replacement bucket from time to time is of such paramount importance, it seems timely to mention a hint from *Kaboom!* designer Larry Kaplan. The Head Bomber suggests that players let a bomb detonate just before the 1,000-point milestone is passed. That gives the arcader a chance to collect a bunch of points—enough to replace the sacrificed tub and more—against the easier bomb group one difficulty factor lower.

That's it, gang! Just relax, get comfortable with the feel of the paddle, and let the lights and colors of *Kaboom!* transport you.

Video Frank Says:

Memorize the patterns—it's just about the only way to get an edge in this game!

Laser Blast

Ability Scores

	Laser Blast (var. #1)
Grand Master	!!!!!!!
Master	600,000 pts.
Ace	100,000 pts.
Average	50,000 pts.
Novice	5,000 pts.

NOTE: Add 25,000 pts. to the score multiplied by the variation number if playing above the Cadet level.

Point Values

Scoring in *Laser Blast* is based on a sliding scale that is dependent upon the difficulty level of the specific group of alien ground stations then under attack.

Reinforcement saucers are awarded every time the arcader scores 1,000 pts. While the total number of such additional ships is unlimited, no more than six may be accumulated on the screen at any one time.

How It Plays

Laser Blast is the flip side of the typical invasion game. Instead of manning a cannon at the bottom of the playfield and firing up at the invaders, in *Laser Blast* the arcader controls a squadron of three flying saucers which begin their attack runs on alien ground bases from the top left corner of the screen.

The attack force is guided with the joystick, one saucer active at a time, in raiding missions against a series of increasingly robust bases. Movement is accomplished by moving the joystick in the desired direction, subject to other factors in the game.

Pressing the action button causes the laser gun to project from the bottom of the saucer in play. After aiming it in one of the three permissible positions—perpendicular to the ground and 45° in either direction—releasing the button projects the deadly beam.

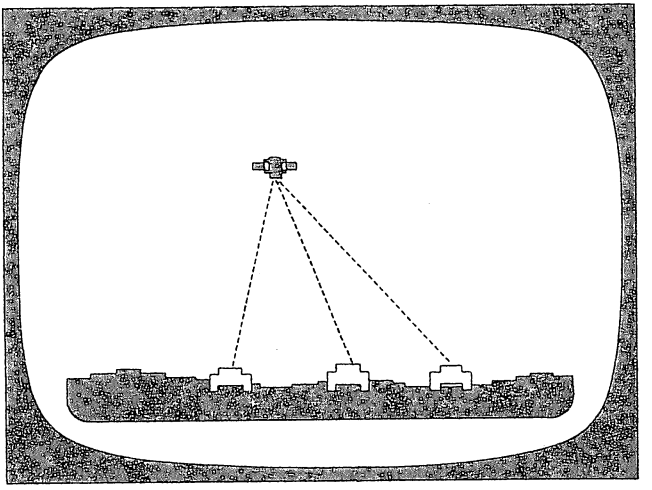
The bases are encountered in clusters of three. All have the capability of firing laser weapons, though only one base may fire a ray at a time. The aliens can track the arcader's approaching spacefleet on high-powered radar.

In addition the ground forces are protected by a force field that will admit the laser bolt but will not allow the saucer itself to descend below a certain height. Each wave of ground bases has a better shield system than the last, at least in most instances, so the saucer squad will be forced closer and closer to the top of the field as play continues. After the ground forces reach difficulty factor 32, the highest, the shields do not strengthen any more. (This degree of difficulty is attained with the sixth set of bases in game #3 and the second set in game #4.)

Strategy

This is a real "blood and thunder" videogame. With the joystick in the hands of a skilled arcader, sessions of *Laser Blast* frequently turn into electronic marathons. Everyone wants to make the six-figure numerical score roll over to display this cartridge's signature—a series of six exclamation points.

So anyone who hopes to play *Laser Blast* against the big-timers had better be in good enough shape to hang in there until the bitter end. You'll need a powerful responsive thumb on the action button, a supple wrist,

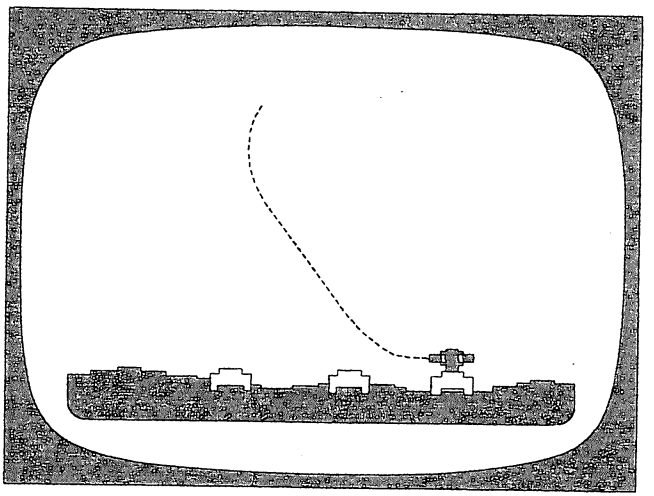


Destroy enemy bases early in the game with minimum movement.

and lots of tensile strength in the fingers to hold the controller steady. That's what it takes to earn Activision's coveted "Commander" patch.

There are four variations on the *Laser Blast* ROM cart. In any case except #1 most players will quickly find themselves in trouble if they haven't already conquered this space-themed shoot-'em-up. In variation #1 the planetary antiaircraft installations react so slowly that a skillful player should be able to continue zapping bases until it hurts to press the action button.

At the higher skill levels, however, reinforcements arrive so quickly and react so speedily to the presence of a saucer in their airspace that the player won't be



Guiding your saucer for a crash landing atop an enemy base after blasting it with lasers.

able to relax concentration for even a few seconds.

To triumph in game #1 it is necessary to develop a rapid-fire technique that takes out the ground stations in a swift one-two-three barrage. A wasted shot will often cost a spaceship.

Eliminate the planet's guns in left-to-right sequence. Occasionally, to avoid becoming too predictable to the ack-ack gunners, introduce a slight variation in the progression from left to right. After blasting the first base in line, move your saucer over the middle ground station. Instead of firing directly down, angle the laser cannon to take out the base farthest to the right before polishing off the one in the center. Some variety in choosing the patterns of assault against the alien ground forces should be used in all *Laser Blast* variations.

Firing the saucers' weapon isn't quite as easy as it looks. Unlike many other electronic games *Laser Blast* will not fire a shot when the action button is pressed. That only lowers the gun for aiming with the joystick. The gun only spits radiant death when the button is released. Better players try to hit the button with a flicking motion, instead of keeping a digit anchored on it as in most other contests.

The danger increases significantly once the player gets beyond game #1. Quick and constant movement is necessary to ensure survival in the more challenging variations. A saucer that hovers in the same spot for even one second longer than it takes a base to aim its cannon is going to be atomized.

The force field probably causes more problems for novices than any other single factor in *Laser Blast*. It gets stronger as play progresses, pushing the saucers closer and closer to the top of the screen.

Actually the force field is just a distraction. Ignore it. Pretend you've got to keep your ships at the top of the screen right from the beginning. Constant height adjustments just mess up timing and get in the way when you're trying to develop a consistent plan of attack.

As the *Laser Blast* instruction folder suggests, pilots shouldn't give up one of their ships at the instant it is slapped out of the sky by a laser from the ground. Guide it all the way to earth, aiming to land it smack on top of one of the ground stations. This not only adds points to your score, but leaves one less enemy for your replacement ship to battle.

Video Frank Says:

Don't become a sitting duck! Hover over the base stations only when you're actually firing!

Missile Command

Ability Scores

	Missile Command (var. #1)
Grand Master	125,000 pts.
Master	75,000 pts.
Ace	50,000 pts.
Average	10,000 pts.
Novice	5,000 pts.

Point Values

Enemy Cruise Missiles: 125 pts.
Enemy Interplanetary Ballistic Missiles: 25 pts.
Unused Antiballistic Missiles: 100 pts.
Saved Cities: 100 pts.
These basic scores are affected by the multiplier for the wave to which they belong.
Waves 1–2: Scoring as shown
Waves 3–4: Twice shown score
Waves 5–6: Triple shown score
Waves 7–8: Four times shown score
Waves 9–10: Five times shown score
Waves 11–13: Six times shown score
Bonus City: Scoring 10,000 pts. earns an extra city. (Six is maximum at any one time.)

How It Plays

Aliens from the belligerent planet Krytol have attacked your planet, Zardon. Although your home world is crime-free and quite pacifistic, Zardon does possess a sophisticated defense system that is, at least theoretically, capable of protecting the half-dozen cities arrayed across the bottom of the screen.

As commander of the base located at the bottom-center of the playfield, the arcader must blow up the barrage of cruise and interplanetary ballistic missiles launched by the Krytolians. You are encouraged to husband your supply of antiballistic missiles (ABMs), because unused defensive rockets are worth bonus points.

The attack comes in a succession of increasingly fast waves. The faster the rockets come down, the more they are worth if you successfully destroy them.

There are three kinds of enemy missiles. Interplanetary ballistic missiles carry most of the load for the Krytolians. They streak down the sky like shooting stars. Cruise missiles somewhat resemble satellites. There are two types. The smart ones try to evade the Zardonian ABMs, while the dumb ones just plummet straight down toward the ground like stones.

The arcader uses the joystick to zip a cursor across the middle of the screen in the sky above the cities and base. Pushing the action button fires an ABM so that its course will cross the cursor's position at the time of the launch. The base receives a total of thirty missiles with which to combat each wave, but only ten missiles at a time are transferred from the underground dump (located in the lower left corner) to the base. If a

Krytolian rocket strikes a base, all unused ABMs it contains are destroyed, though it can be reequipped from the dump if any missiles remain there.

If the defender runs out of missiles before the attacker does, it's too bad. The rockets continue to smash down cities until the wave is exhausted.

The principal difference among the cartridge's thirty-four variations (half solitaire, half two-player) is the speed of the first wave. The easier versions start the action at the lowest speed, while a few actually begin with everything going full blast.

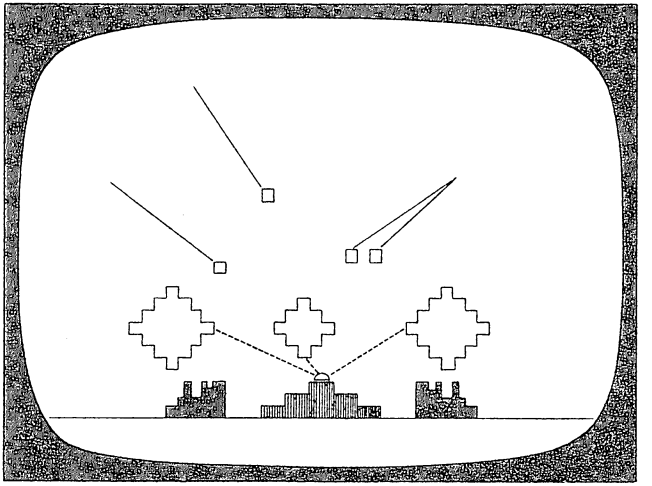
The variations are also evenly split between those with fast target control and those that utilize slow target control. The latter permits more precise aiming, while the former lets the defender move from target to target more quickly.

The difficulty switch governs the speed of the ABMs. Set at "B," the defender's missiles travel at a normal rate. When moved up to "A," however, the ABMs climb more slowly and are thus harder to use.

Strategy

The single most important technique in *Missile Command* is estimating the future course of enemy missiles. You've got to shoot *ahead* of the onrushing rocket, striking at where it will be, not where it is at the time you launch an ABM. The faster the wave, the more "lead" you'll need to give ABMs if you expect to keep the cities of Zardon standing.

Don't fire too quickly during the early rounds. Wait until two or more missiles are about to cross in the air, and fire so as to take out several enemy weapons with

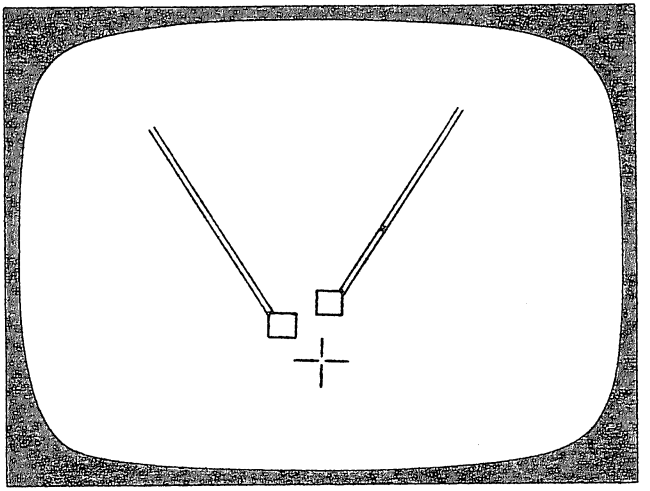


Protect cities to the left and right of the missile command as play-speed increases.

a single shot. After all, each unused ABM will be worth points at the end of the wave.

After things speed up, the most important aspect of play becomes accurate positioning of the cursor. This means that once you fire an antimissile missile at an incoming rocket, don't stick around to find out what happens. This game does not provide any breathers during a wave attack for contemplating the perfection of one's marksmanship. Move on, lock in on another attack, and knock it out of the sky.

It is sometimes effective to create an "umbrella" over your command center and the primary cities—the metropolises immediately to the right and left of the



Set up a defensive "umbrella" with explosions above cities.

Always try to take out more than one converging missile with a single ABM.

Always defend the cities to left and right of command center.

command station. This is harder to do with this cartridge than it is in the arcades, where *Missile Command* machines are equipped with lightning-quick track-ball controllers. This tactic shouldn't be recklessly invoked, however, since it does use up the supply of missiles at a furious rate.

Losing all six cities will end the game, but it's a lot more serious to take a missile in the old command base than it is to lose a couple of population centers. If the Krytolians put the missile launchpad out of commission, the rest of your cities will be well on their way to becoming grade-A rubble.

The next priority is keeping the previously mentioned primary cities alive and well. Their proximity to the command center makes them a lot more convenient to defend than the outlying one at the edges of the screen. Trying to protect one of these and cities while still maintaining security in the airspace over the command center can be an exercise in frustration when the Krytolian rockets are coming thick and fast.

At the highest difficulty level keep the cursor fairly low on the screen. Don't worry, the incoming missiles will get to you soon enough. Steel yourself to the idea of ignoring less important missiles when the action really gets jumping. If it looks like an interplanetary ballistic missile is heading toward an already flattened city or to a far corner, overlook it in favor of concentrating on direct threats to the command base and primary cities.

Finally, don't give up just because all your cities are as flat as pancakes. Keep blazing away, especially at the higher-value targets. (These are easily distinguished from the others, because they leave no vapor trail during their descent.) If you can collect the ten

thousandth point during such a "lame duck" round, then you'll be able to continue into the next wave with at least one city and build back up from there.

Video Frank Says:

If you can't protect everything, save your effort for the command base and the two neighboring cities.

Night Driver

Ability Scores

	Night Driver (var. #1)
Grand Master	55
Master	50
Ace	45
Average	40
Novice	30

Point Values

Points are awarded in *Night Driver* based on the distance traveled within the time limit. There are no signposts to alert the driver that he is approaching the milestone markers that will further increase the score.

How It Plays

In this solitaire driving game the arcader gets behind the wheel of a speedy racer. The television screen presents a view of a two-lane blacktop highway as the motorist would see it through the front windshield. The player, using the paddle controller, must keep his auto streaking safely through the ink-black night.

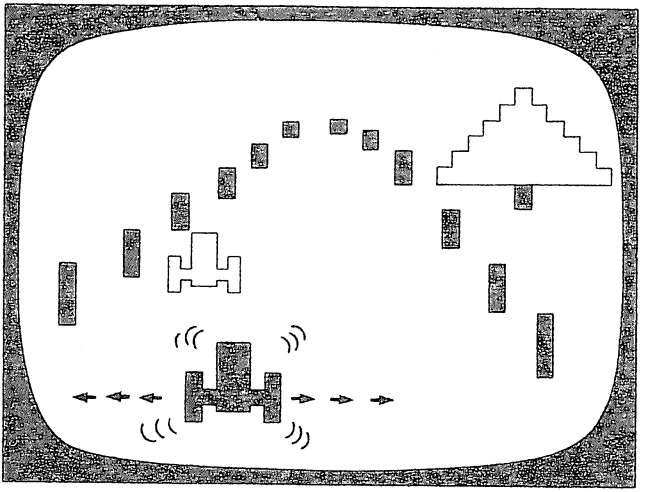
Half the variations in this cartridge challenge the electronic driver to get as far as possible along the course in ninety seconds. (An on-screen clock provides a constant time-check.) The other four variations, intended mainly for honing skills, have no time limit. Arcade addicts can even re-create a twenty-four-hour road race if they so desire.

There are three basic courses stored in the program, rated "novice," "pro," and "expert." The fourth—and most demanding—course is randomly generated. Thus it is completely different every time you play.

The knob on the paddle controller is used to steer, while the action button functions as the accelerator. There is no special control for the brake.

Strategy Hints

Now *you* can get white-line fever without ever leaving that seat in front of the TV set! Folks who get really deep into this one are definitely candidates for a lucrative career in long-haul trucking. The stark black background coupled with minimalistic graphics can make an arcader's eyes spin like pinwheels after too long at the paddle controller. So though practice abso-



Too much steering can throw you off the road or into an obstacle—stay in the center of the road as much as possible.

lutely does make perfect in *Night Driver,* get your experience in relatively small doses.

Actually the visual focal point isn't a white line, but rather the luminous posts that line the edges of the road. The gamer steers the car between these twin tracks, using the markers as reference points to keep all four wheels rolling smoothly on the otherwise invisible thoroughfare.

If you prefer the bludgeon to the rapier, *Night Driver* will never be your favorite game. Oversteering is the mistake novices make most frequently. And once your car slews off the road, you're about twice as

likely to crash almost immediately on the *other* side of the highway.

Never forget that this is a race against the clock. Strategy is completely governed by the overwhelming need to use the allotted ninety seconds as efficiently as possible to make the car travel as far as possible.

This definitely means learning to nudge the paddle knob this way and that so as to avoid all crashes. Not only do drivers lose two precious seconds as a penalty, but there's an additional penalty—the time it takes to rev the motor to top speed.

Less obviously, swerving from shoulder to shoulder on the road reduces the total distance traveled. Remain as close to the center of the road as possible. When your racer is zooming right down the middle, no position will ever be farther away than half a screen-width. When the honk of an oncoming car tells you it's time to move over temporarily—and note that the horn is sometimes a false alarm—go only as far to the right as is needed to get past the traffic heading in your direction.

Finally, get used to the idea of keeping the gas pedal (the action button) flat to the floor. There's no percentage in going anything less than top speed. Unlike some electronic racing games there is no corner that an arcader with decent reflexes can't take at top speed in *Night Driver*. By all means try the course more slowly the first couple of times to become familiar with its layout, but be prepared to go all out in competition.

Night Driver is best approached as a noncerebral videogame. Assuming you are at least average in hand-eye coordination, instincts will serve you better than a lot of preplanning. Still, it wouldn't hurt to

notice the patterns the posts make as they sweep back and forth on the screen to help identify turns an instant before you have to drive through them.

Pac-Man

Ability Scores

	Pac-Man (var. # 1)
Grand Master	10,000 pts.
Master	6,000 pts.
Ace	2,000 pts.
Average	750 pts.
Novice	250 pts.

Point Values

Dotted Line: 1 pt.
Power Pill: 5 pts.
Vitamins: 100 pts.
First Ghost: 20 pts.
Second Ghost: 40 pts.
Third Ghost: 80 pts.
Fourth Ghost: 160 pts.

How It Plays

The most popular of maze-chase games requires the arcader to steer the yellow *Pac-Man* character around the labyrinth with the joystick. Whenever the gobbler passes over one of the little dashes that line the passageway, a point is scored. A complete game of *Pac-Man* consists of four such gobblers, received one at a time.

A quartet of goblins hopes to thwart this electronic munch-out. The four ghosts chase the *Pac-Man* critter hither and yon through the maze, and they will eat the pie-shaped character up if they catch it.

Strategically placed in each of the playfield's four corners is a special power pill. Not only is such a morsel worth five times as much as a run-of-the-mill dash, but eating one gives the gobbler a temporary burst of superstrength. It's like what happens to Popeye after he wolfs a can of spinach. Fortified in this fashion, the plucky gobbler can turn the tables on its tormentors and eat them up for bonus points. Of course the effect of chomping a power pill soon wears off, forcing the *Pac-Man* character to once more flee for its life.

Vitamins pop up near the center of the playfield, remain for a few seconds, and then vanish. They provide no special powers, but do count 100 big points when eaten.

Variations on this cartridge adjust the relative speeds of the gobbler and the goblins. Obviously the easier games are those in which a fast-moving *Pac-Man* character is chased by ghosts that move at what the designer calls a walking or jogging pace. Con-

versely, a slow-moving gobbler can be matched against goblins moving on the run for an extra measure of challenge.

Two-player versions put a pair of rival gobblers on the screen in alternating turns.

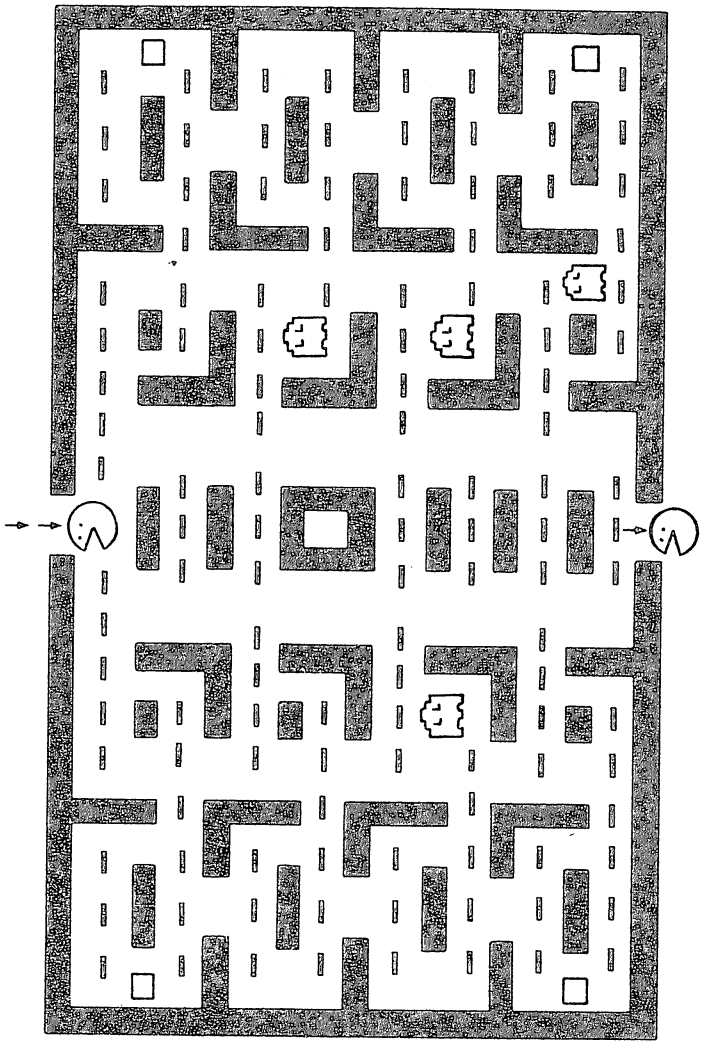
Players can win extra gobblers without limit by clearing the entire playfield. One extra gobbler is awarded each time the maze is swept totally clean.

Strategy

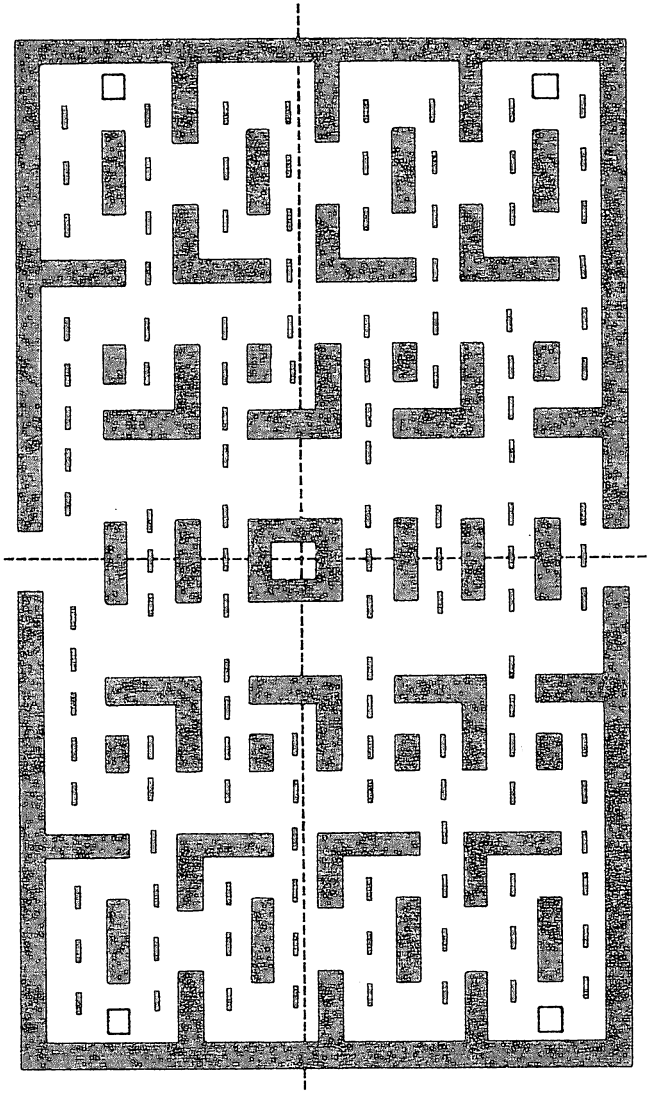
The single most important element of *Pac-Man*, whether it's the hit coin-op or this VCS home version, is maneuverability. Despite this cartridge's many differences from the original, the ability to make swift, sudden turns is all the more crucial as a result of the contest's "mechanical" problems. The extremely unresponsive joystick action demands precise timing to navigate even the simplest corridor. The VCS gobbler is just fine when heading in a straight line, but often turns balky when commanded to make a sharp turn toward the bottom of the screen.

The only counter to this situation is practice, practice, and more practice. The joystick response improves as the overall speed of the game builds, but in the semiofficial variation #1, even experienced Pac-Maniacs will have trouble making the gobbler obey commands.

The most significant change from the coin-op machine lies in the goblins' eyes, which do not "see" in their direction of travel. They just rotate around and around in a clockwise direction, not giving a clue about where they're headed or if they've spotted the



The gobbler scrolls off of the bottom playfield through the tunnel and reappears at the top.



Divide the playfield into four imaginary sectors and clear them one at a time.

gobbler. This proves unnerving even to masters of the commercial arcade device.

We could detect no "safe spots," as are found in the arcade game. There is no place in the maze where a fleeing gobbler can hide from the pursuers. Clever use of movement, however, can still lure the goblins into cul-de-sacs that allow the arcader to catch a couple of seconds' rest.

Sectoring the playfield is an excellent solution to the goblin problem. Divide the screen into equal-size quadrants and clear one at a time. Never—repeat, *never*—leave one or two dashes behind. Retracing steps is the hallmark of the novice *Pac-Man* player. Try never to cover the same ground twice. Move in a smooth serpentine pattern until the area is clean. Some arcaders postpone downing the power pill until a quadrant is finished. This encourages the four goblins to mass, making them easier to munch after the gobbler scoops up the superenergizer. (A tie is always decided in favor of the gobbler, incidentally, and the last three dashes are virtual "gimmies.")

Don't be afraid to scroll through the tunnel that leads off the top and bottom of the screen. It saves the time of having to move through the twisting maze and the goblins won't follow, at least in the game's early stages.

As *Pac-Man* progresses through field after field, it is sometimes advisable to play an occasional "safe" round to accumulate an extra gobbler. Concentrate on the pills and ignore—or even avoid—the ghosts.

The opening seconds of a game can often be the most challenging. The goblins leave the corral in a predetermined pattern from which they will never vary. In variation #1, for instance, the chasers leave

their base on the right side, travel to the right one space, and then head down. Then they swerve left and down, go right and down once more and finally left in a peculiar snakelike motion. When the gobblins are committed to a left turn, immediately move the gobbler to the right and sweep up the playfield. This escape route, by the way, only works for this specific variation.

Bonus prizes also play a far different role in the home version than they do in the coin-op machine. Unlike the commercial arcade game's succession of extra goodies, each worth a little more than the last, here the bonus target is always the same circle inside a square worth a constant 100 points. A free 100 points is nothing to sneeze at, of course, and these prizes should be devoured whenever possible.

Although, as previously mentioned, mastering steering will be the biggest hurdle to success, it pays dividends when accomplished. The goblins are actually rather easy to fake out. By starting to move the gobbler in one direction and then scooting the opposite way, the goblins frequently become confused. As you develop expertise, you'll find it's relatively simple to lure the goblins in any desired direction.

Spacechase

Ability Scores

	Spacechase (var. #1)
Grand Master	40,000 pts.
Master	30,000 pts.
Ace	20,000 pts.
Average	10,000 pts.
Novice	5,000 pts.

NOTE: Scores are based on "B" difficulty. Add 1,000 pts. if "A" difficulty is employed. If maximum heat-seeking missiles are included, raise rating one notch.

Point Values

With limited heat-seeking missiles:

Level 1 Alien Ship: 125 pts.
Level 2 Alien Ship: 200 pts.
Level 3 Alien Ship: 275 pts.
Alien Missile: 50 pts.

With Maximum Heat-Seeking Missiles:

Level 1 Alien Ship: 175 pts.
Level 2 Alien Ship: 250 pts.
Level 3 Alien Ship: 325 pts.
Alien Heat-Seeking Missile: 100 pts.

How It Plays

Spacechase, though essentially in the invasion game mold, boasts some intriguing differences from its predecessors. The arcader directs a cannon with full horizontal and limited vertical movement with which a squadron of attackers must be battled just beyond Earth's upper atmosphere.

The attackers enter from the left and right edges of the playfield. They crisscross the screen, moving randomly and slinging bombs at the cannon. Variations #7 through #12 and #19 through #24 add the danger of maximum heat-seeking missiles that home in on the arcader's defenseless weapon. The interstellar enemy gets increasingly desperate as the engagement continues and fires more and more of the deadly heat-seekers.

The player starts the game with three starcruisers. Reinforcements from Earth are possible, and one additional cannon arrives for every 10,000 points scored. *Spacechase* automatically switches to difficulty level #2 after the first 10,000 points are tallied and leaps to the third level once the 40,000-point mark is surpassed. It is possible, using the "game select" lever, to commence the action at the second or third level if desired.

The defender can exert a measure of control over the speed at which the alien ships move by moving the starcruiser in play up and down in the vertical plane. When the ship is as close as possible to the bottom of the screen, the enemy craft move more rapidly. They slow down as the cannon is advanced up the playfield.

About half of *Spacechase*'s twenty-four variations are night missions. Other than providing what some

players may find a more eye-soothing background, however, there is little difference between fighting in darkness or daylight.

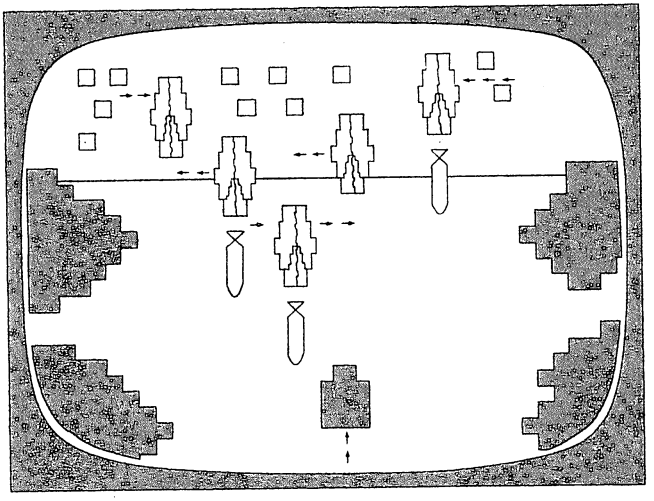
Strategy

Spacechase is an unexpectedly difficult cartridge that challenges arcaders to deal with a small number of randomly moving targets. Novices have displayed a tendency to somewhat underrate the situation—until they actually grab the joystick and try to nail one of those elusive alien craft.

The main problem: It's very hard to aim at a target when there is every likelihood that it will unexpectedly change direction by the time the shot gets near enough to inflict damage. Gamers who grumble every time they miss a target are in for a rough session.

The game begins when four slow-moving but heavily armed alien spaceships appear on the horizon. The invaders weave back and forth on two horizontal levels while putting out a seemingly inexhaustible barrage of lethal rockets. There are two basic types: limited and maximum heat-seeking missiles. The latter type is highly dangerous and will pursue the arcader's vessel relentlessly, even altering direction to track its quarry.

Fortunately there are two defenses against the deadlier variety of weapon. After the telltale "whooping" sound that signals the approach of a maximum heat-seeking missile alerts the defender, the first thing to try is knocking it out with a missile. All enemy missiles are detonated by a direct hit—and earn some extra points for the players. The other, riskier alternative is

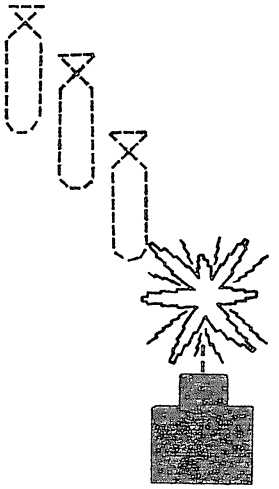


Note the proximity of the lowest alien to the cannon.

to run. This will only stand a chance of succeeding when the starcruiser is moved to the lowest possible point on the playfield.

Players who have chafed under the restricted movement possible in most other games may be tempted to go overboard here. Moving the starcruiser all the way up can have disastrous consequences. The closer you are to the alien ships, the easier it is for one of them to pick you off with a heat-seeker. And, of course, you have no comparable guided weaponry on the starcruiser.

Therefore keep the defending ship low on the



The "heat-seeking" missiles appear and disappear as they descend; wait for one to arrive right on top of your cannon to fire.

screen, at least until the invaders in the lowest horizontal row are obliterated. Move up the screen only when it's necessary to blast a stubborn, erratically moving last enemy vessel.

Although picking off incoming missiles with your own rockets does score extra points, it isn't necessarily wise to tempt Providence—and the laws of probability—by actually going after them.

Make no mistake, probability is the key. Up to 10,000 points, there is one maximum heat-seeking missile per 256 shots. This doubles at the 20,000-point mark and further increases at regular intervals thereaf-

ter. Killing the aliens quickly limits the number of total shots, and therefore reduces the number of heat-seekers the starcruiser must overcome.

A fleet of five sleek green spaceships replaces the original quartet once the tally mounts over 10,000 points. The extra craft is located on a closer horizontal line and so is especially dangerous. If the invader's point ship drops a heat-seeker, it will smash into the starcruiser before you can even blink. Always aim for the closest targets first to avoid this.

Those skillful enough to reach the 40,000-point plateau must then contend with six speedy dreadnaughts, symbolized on screen by black crosses. Try to concentrate on methodically eliminating one at a time, but always keep an ear cocked for the telltale sound of the heat-seeking missile!

Some players, in invasion games, prefer to discharge continuous fire by keeping the action button

Video Frank Says:

Increase the odds of scoring a hit by aiming where you think two invaders will cross.

constantly pressed. This greatly aids the elimination of incoming missiles, but it has the flaw of disrupting the arcader's pace and timing. So keep up a steady barrage of fire, but don't become a mindless button-pusher. Be ready to change your pattern of attack whenever the one you're currently using goes stale.

Space Invaders

Ability Scores

	Space Invaders (var. #1, "A" difficulty)
Grand Master	150,000 pts.
Master	100,000 pts.
Ace	75,000 pts.
Average	25,000 pts.
Novice	10,000 pts.

Point Values

First Row Aliens: 5 pts.

Second Row Aliens: 10 pts.

Third Row Aliens: 15 pts.

Fourth Row Aliens: 20 pts.

Fifth Row Aliens: 25 pts.

Sixth Row Aliens: 30 pts.

Command Ship: 200 pts. (Except in versions in which both players are on the screen at the same time.)

How It Plays

In an effort to give home arcaders a little extra, Atari shoehorned 112 game variations into its *Space Invaders* cartridge. There are seven basic configurations to which participants may add optional rules if they so desire. The groups are as follows:

Group A—solitaire. There are solo contests closely related to the coin-op *Space Invaders* game.

Group B—two players with alternating turns. Each gunner is essentially playing a solitaire game. An arcader shoots aliens until his cannon is destroyed, at which point the other competitor takes over the screen.

Group C—simultaneous two-player action. Both cannons are on the screen at the same time. The command ships are worth 100 points each, and the surviving player is awarded a bonus of 200 points when the other one is disintegrated.

Group D—two players, alternating shots. Neither of the combatants can fire twice in a row. In fact if you don't shoot quickly enough, the computer automatically fires your cannon so the other gunner can have a turn. Bonus scoring is the same as in group C.

Group E—two players, each controls one direction. There's only one cannon, which must be worked by both gamers in tandem. One can move it left, the other can send it right, and either can fire the laser. Bonuses are as in group A.

Group F—two-player with alternating fire and control. One player moves the cannon and then fires the gun once. Then the other player does the same.

Group G—two-player with permanently divided control. One gamer always moves the cannon while the other is in charge of firing.

The basic outline of the game is virtually identical in all of these versions. The arcader directs a horizontally mobile cannon situated at the bottom of the playfield. By pushing the action button, the defender can fire up at a legion of extraterrestrial creatures, organized in six vertical columns with six monsters in each.

The invaders don't just stand there and wait to die. They drop laser bombs of their own and march down the field in an attempt to make a landing on earth. If a bomb strikes the cannon, it is destroyed. Losing all three cannons or permitting the invaders to land ends the game.

A trio of shields offer some shelter during the early going. These shelters are gradually worn away by laser fire striking them from above and below. Since the invasion force starts each round one level lower than it did the previous time, the shields disappear without a trace after the first several rounds.

Periodically a command ship crosses the screen near the very top. It drops no laser bombs, but it is a bonus target worth 200 points in most *Space Invaders* variations.

There are four optional rules: moving shields, zigzag laser bombs, invisible aliens, and fast laser bombs. All make the game even more challenging. If that's not enough, switch the difficulty switch to the "A" setting and the cannon will become a much easier target for the aliens, because it will double in size.

Strategy

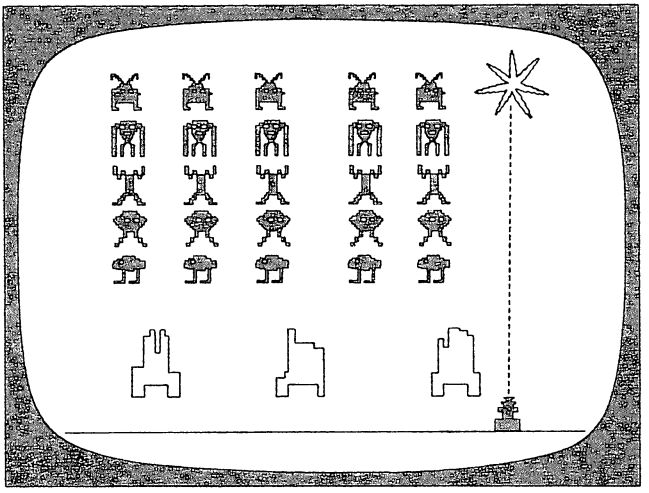
Want to be a *Space Invaders* champion? All you've got to do is practice until you develop a pattern. Big scores await those who can create a sophisticated sequence-of-play that you can follow with machinelike precision.

Some games can hardly be said to contain a pattern. Others, like *Dodge 'Em,* can be beaten handily once the pattern is perceived.

Spacer Invaders falls somewhere between these extremes. There is indeed a pattern that can markedly extend your period of play once it is thoroughly assimilated. Yet the *Space Invaders* pattern is not merely a shortcut to the land of boredom. Utilizing it eliminates just enough of the attackers to give the arcader some latitude in creatively handling the last few creatures on the screen.

Some observers have criticized the use of patterns as a step in the direction of mindless physical repetition. A somewhat more freeform contest like *Space Invaders,* on the other hand, creates a vastly different ambience. The game becomes something like an electronic mantra. The arcader, caught in a clear-eyed trance state, concentrates on the advancing danger with the tight control of a laser beam. It also provides the player with the opportunity to prove some measure of mastery over the microprocessor, a chance that doesn't come often enough to please some. (Of course the invaders always win in the end, demonstrating to what extent the silicon chips have gamers at their mercy.)

Some truly dedicated players find the presence of the shields during the onslaught of the first three attack



Always eliminate the far left and right columns completely at the outset of the game.

groups more of an annoyance than an aid. They can get in the way of smooth execution of the pattern.

The secret to defeating the invaders lies in the elimination of the columns on the far left and right. Always work from the edges toward the center. The invaders cannot drop one notch closer to the planet's surface until the row has traveled as far as it can in the direction in which it is headed. (This reverses every time the row decreases its altitude.) The narrower the row, the longer it will take to make that trip. That means more time for the gunner.

After the left and right vertical rows are dispatched, the mystery ship makes its debut. After sending it to space monster heaven, sweep the gun to the right, vaporizing the first two invaders in each column.

This leaves a tightly packed group of aliens. Remember that the command ship will continue to put in appearances as long as at least seven of its minions are still airborne. Some players like to gut it out by waiting until the final seven have descended to just above the height of the cannon before getting down to business.

Pattern play begins in earnest with the fourth legion of invaders. From your starting position at the lower left, slide to the right and wipe out the aliens in the first two rows of each column. When the gun gets to the column on the far right, eliminate it entirely. Then it's a sweep back to the left, destroying one or two nasties in each column along the way before clearing out the left-most column down to the very last tentacle. From there on it's up to you to dispatch the rest of the horde in any way that satisfies your personal aesthetics.

Video Frank Says:

Never leave small groups of aliens at opposite ends of the playfield. By the time you dash back and forth between them, one bunch or the other will land and end the game.

Note that the fifth crew of invaders starts even lower on the screen than the fourth. Fortunately the succeeding legions never begin their attack from any closer point. The big danger at this juncture is getting smashed by a bomb before you can even move or, only slightly better, taking a lethal laser bomb an instant after you begin that sweep to the right. Because of this possibility some gamers like to start out by zapping the two lead aliens in the column second from the left. (That's the column that begins each round poised directly over the cannon.)

Those who want something even more foolproof are invited to try this method: Memorize the nine firing patterns used by the aliens in the Atari VCS *Space Invaders* program. Once you know exactly where and when the bombs will fall, only an out-and-out mistake can stop the point total from rising to the stratosphere.

Stampede

Ability Scores

	Stampede (var. #1)
Grand Master	10,000 pts.
Master	3,000 pts.
Ace	1,500 pts.
Average	750 pts.
Novice	250 pts.

Point Values

Black Angus: 100 pts.

Light Brown Jersey: 25 pts.

Medium Brown Guernseys: 15 pts.

Dark Red Herefords: 3 pts.

How It Plays

This electronic ridin' an' ropin' contest puts the gamer in control of an electronic horseman who is in the midst of a cattle drive. The on-screen wrangler, situated at the left end of the playfield, ropes four different types of cows for points.

Keeping the animals in front of the cowboy and heading toward the right edge of the screen is crucial. If three dogies get past him, the game is over.

The cowboy and his steed are maneuvered with the joystick, with the action button utilized to toss the lariat at a steer. To accomplish this the cowboy is positioned directly behind the target and the proper distance away. If everything is lined up right, a push of the button will capture the steer.

Herding is also an important activity. When the cowpuncher gallops right up behind a cow, the animal will speed up and run toward the right side of the screen.

There are eight games included on the cartridge, rising in difficulty from *Sidekick* (variation #1) to *Cattle Baron* (variation #9). The steers begin at a trot in the first four contests, but they will start at a full run in the quartet of more challenging versions.

The difficulty switch, when set to the "A" position, will shorten the rope. Scoring 1,000 points will increase the number of dogies. However it is impossible to raise the total beyond nine at any one time.

Strategy

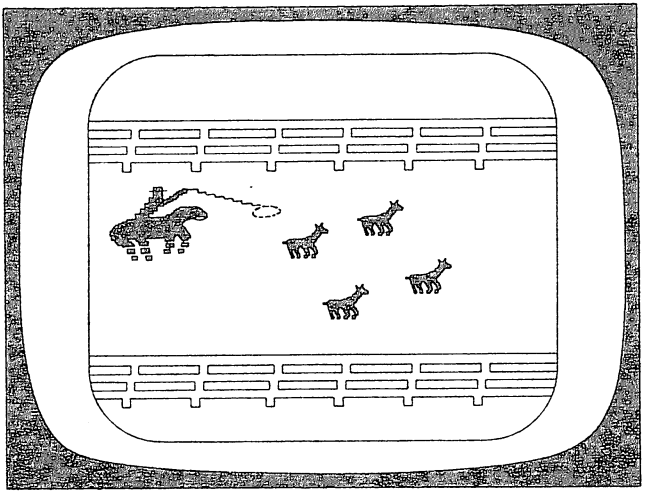
Stampede is such a challenging game that the arcader's score may not improve radically even after he or she discovers the most important trick. In fact the point total may dip slightly before practice sends it upward once more.

The problem is that it is just about impossible to approach *Stampede* as a straightforward hand-eye action contest, scooping up every cow that trots onto the range. When more than one black dogie turns up at the same time, even the fastest roper on earth won't be able to lasso a maverick at the top of the field and then get downscreen rapidly enough to snare another one.

The answer, as designer Bob Whitehead hints in his stories printed in the instruction folder, is to never rope a red cow. Catch all the white and brown cows until the horizontal rows are left empty except for one red-hued animal in each. Decide where on the playfield

Video Frank Says:

Never open more than one horizontal lane at a time, or the dogies will get behind you in nothing flat.

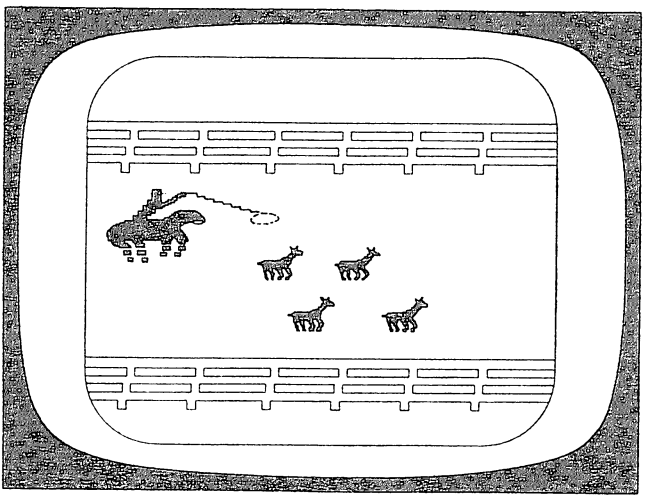


Allow the screen to fill up with red cows, then clear out the level of your choice.

you want to face the next group of point cows—and then only lasso the red cow in that particular row.

The cows, at this point in *Stampede,* will always appear in the same sequence: white, brown, and then red again. When you next rope a red steer, you'll see either a maverick or a skull. The sequence never alters: first white, then brown, and finally either a skull or maverick. Memorize this two-stage progression of beasts to ensure that few surprises will pop into the playfield to upset your plans.

The next goal, after learning the pattern, is to develop the skill of keeping the range full of cows with-



Channel the red steers into rows where they can be controlled.

out letting any slip past the cowboy. Watch how the herd runs. If the cows near the top are a good distance in front, move down the screen and pick off the red dogie. Get the white and brown cows in that row when they appear, and skeedaddle up-screen to nudge the red critters forward once more.

It must be admitted that at the higher skill levels—variations #6 through #8—implementation of these suggestions becomes very, very difficult. These contests are more akin to bronc-busting in that any arcader who can stay on the pace for more than a few seconds deserves a salute.

Super-Breakout

Ability Scores

	Super-Breakout (var. #1)	*Super-Breakout* (Progressive)	*Super-Breakout Cavity*
Grand Master	7 walls	4,500 pts.	8 walls
Master	3 walls	3,000 pts.	5 walls
Ace	600 pts.	1,000 pts.	2 walls
Average	400 pts.	600 pts.	1 wall
Novice	200 pts.	300 pts.	300 pts.

Point Values

Red Brick: 7 pts.

Orange Brick: 7 pts.

Yellow Brick: 4 pts.

Green Brick: 4 pts.

Aqua Brick: 1 pt.

Blue Brick: 1 pt.

There are no bonuses or special targets.

How It Plays

This catch-all cartridge consists of five versions of the classic electronic game *Breakout*. All but one, *Progressive Breakout*, is available in both one- and two-player modes.

Breakout (variations #1 and #2) is essentially the familiar game of that name. The only significant deviation is that this time there's an unlimited supply of replacement walls.

Double (variations #3 and #4) provides the arcader with two paddles, one stacked over the other, near the bottom of the playfield—and two balls that are released simultaneously to start each round. Brick point values are doubled while both balls remain active.

Cavity (variations #5 and #6) arms the player with two paddles arrayed in the same fashion as in *Double*. Extra balls are embedded in pockets within the wall and are freed when the bricks trapping them are eliminated. Point values are doubled if one extra ball is in play, tripled if both of the cavity balls are zipping around the field at the same time as the regulation one is also alive and kicking.

Progressive (variation #7) adds a touch of *Space Invaders*–style action. The walls march down the screen toward the player's paddle. They change color as they advance, dropping point value as they near the bottom of the screen. New rows of bricks are created at the top of the playfield, and the pace quickens as the game continues.

Children's Versions (variations #8 and #9) are designed to provide the very youngest players an appropriate degree of challenge. Everything moves more

slowly, and, unlike other *Breakout* variations, the paddle won't shrink to half its original size when the ball strikes the upper boundary of the playfield.

Strategy

Each of the games included on this cartridge demands a different approach on the arcader's part. Therefore let's consider each of them separately in turn.

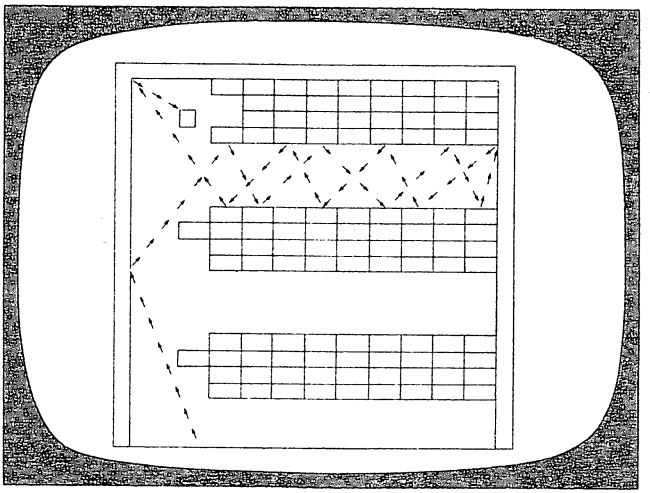
Breakout. See the separate listing for the original *Breakout* cartridge for appropriate hints. The addition of extra walls provides new goals for the really good players who found the old two-wall limit frustrating.

Double Breakout. The two paddles are no gift. The top one is a sucker trap. You'll be tempted to use it to hit the ball. In a word, don't. The upper paddle only serves to cut down the size of the playfield, reducing the amount of time the arcader has to react to the ball's angle of deflection. Any ball slapped by the lower bat automatically passes through the upper one, so don't worry about the ball possibly getting trapped between the pair of strikers.

Play the game as if it were good old normal *Breakout.* Use the lower bat exclusively and ignore the other one. Adhere to traditional *Breakout* strategy, while attempting to keep that extra ball in play as long as possible.

Cavity. The secret is to keep the two extra balls safely trapped inside the wall until you have achieved a breakout.

Aim for the extreme ends of the wall, avoiding the bricks that comprise the ball-prisons. If they are re-

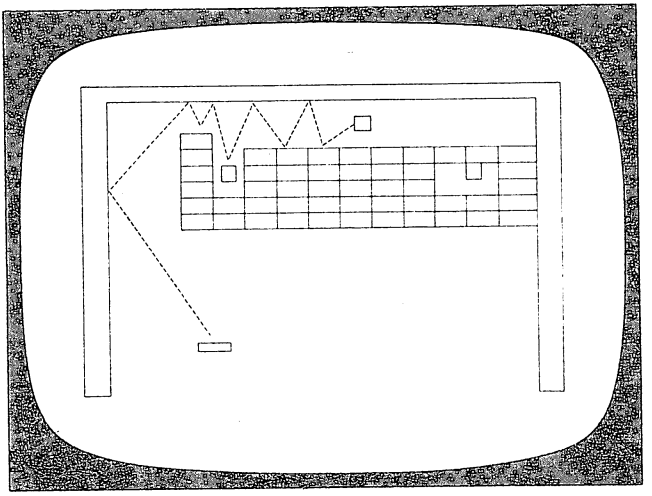


Multiple breakout in *Progressive* version.

leased too soon, the extra balls become mere distractions that compete for the player's attention with the regulation ball.

After scoring a breakout at either end of the wall, however, an ideal situation becomes possible. With excellent timing—and a little luck—you can liberate the bonus balls from *above*.

Not only will all the balls rattle around in the breakout zone scoring fabulous amounts of bonus points, but they will tend to exit this area one at a time with a short interval between each. Of course as the wall is whittled away, this strategy will start to break down. At that point keep one ball in play for the mop-up and let the others fall.



Freeing captive balls from above in *Cavity.*

Progressive Breakout. Many players find this the most interesting variation in terms of the play possibilities. There are, in fact, several possible approaches, each with its own merits and faults.

Some choose to play exactly as they would in conventional *Breakout.* That is, they punch through one wall after another, always on the same side of the field. This creates a whole series of what might be termed mini-breakouts.

The argument against this method is that it generally leaves behind a lot of unhit bricks. These survivors will scroll downscreen until they reach their final position just a heartbeat from the bat, where they become dangerous obstacles.

Bricks descend more and more rapidly as the game continues. Ultimately the wall drops one notch every time the ball strikes the paddle. At that point the only viable strategy is to keep pounding at one side of the wall, forcing the ball up the field where the high-scoring bricks reside.

It is very important to bear in mind that the paddle will halve in size should the ball strike the top of the playfield. The game is hard enough under ordinary circumstances; playing with half a paddle borders on the ridiculous. At most times this boundary is shielded by just-created bricks. If the top of the field does become exposed, hit the ball in a different direction a couple of times. This gives the computer a little time to generate more bricks. There's no sense in handicapping yourself unnecessarily, after all.

As is often the case in action games, economical, controlled movement of the bat is essential to success. The paddle controller should only be moved as far as necessary to strike the ball. Play smart, and you'll soon break through the world of big-time scoring.

Video Frank Says:

Don't try to get every single brick. Once they get too low, let 'em fall off the bottom of the screen!

Superman

Ability Scores

	Superman
Grand Master	Less than 150 pts.
Master	150–200 pts.
Ace	200–300 pts.
Average	300–400 pts.
Novice	Over 400 pts.

NOTE: Using the fast satellites (right difficulty "A") subtracts 20 pts. from score. Having to find Lois Lane (left difficulty "A") subtracts 40 pts. from score.

Point Values

There are no individual point-scoring targets in *Superman*. Completing the quest (jailing the baddies and repairing the bridge) ends the game.

How It Plays

Superman is essentially a solitaire game played against an on-screen clock. There's a two-player option in which one directs vertical movement while the other controls travel in the horizontal plane, but it's not very satisfactory.

The well-animated Man of Steel has an assortment of powers to help him complete his two-part mission. He can fly, has superstrength, and can employ X-ray vision by pressing the action button. Exposure to kryptonite can temporarily cancel these magnified abilities, and only the touch of Lois Lane can restore Kal-El to super-normalcy.

The game begins when Clark Kent gets a tip about a bomb scare down at the waterfront. No sooner does the mild-mannered reporter reach the scene than the Metropolis Bridge blows up! The caped crusader sees Lex Luthor flying off on a heli-pack and five of his archenemy's gang fleeing on foot. Superman must round up the six malefactors one at a time, repair the bridge, and return to the *Daily Planet* building to file the scoop as Clark Kent.

Each "frame" denotes a city block of Metropolis. Leaving the playfield in any direction will cause the adjacent block to appear on screen. Traveling to the east or west will cause the Man of Steel to pass through every block, while heading north or south brings the crimefighter to every block except the ones containing the phone booth and the bridge. A subway, accessed by flying into any of several entrances, allows much faster movement between the various parts of the city. A helicopter is on the scene and may help or hinder the progress of the adventure. Sometimes it

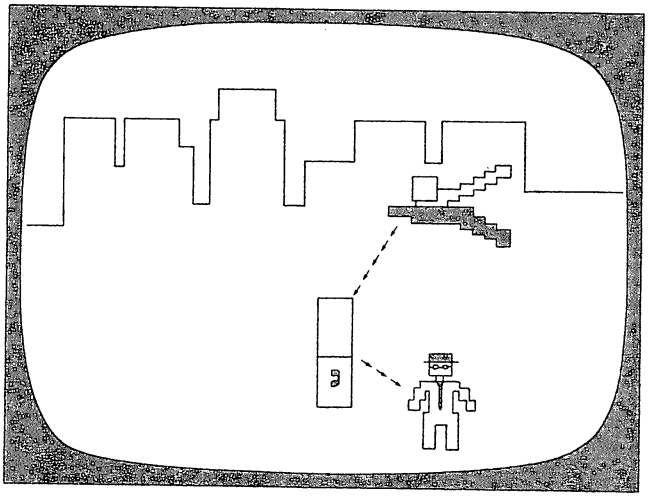
will snatch a carefully collected section of bridge, while on other occasions the whirlybird may carry one of the pesky kryptonite satellites out of range.

The joystick directs Superman's movement. For instance pushing it up causes Superman to fly, while letting it return to the neutral position brings the crimefighter down for a gentle landing. To pick up something or someone or something only requires the Man of Steel to touch it. His burden is released when he lands. A series of bars located at the top of the screen helps the player keep track of the hero's crook-catching success. Each time one baddie is tossed into the Metropolis Jail, one of the bars disappears. (The double-size bar represents Luthor.)

Strategy

Since *Superman* is a game in which a set of tasks must be performed, there are very few shortcuts. Alert players will notice that the clock sometimes starts immediately after hitting the "reset" toggle, while at others the count only begins once Clark Kent has donned the famous red, blue, and yellow costume. Rather than lose precious seconds keep working the "reset" switch until you get a good start.

The arrival of Clark Kent at the waterfront is the signal for Luthor to blow the bridge and scatter his gang to the four winds. Get a jump on the evildoers by immediately reversing direction and exiting the water-front block to the right to get to the all-important phone booth to change into the super suit. If this is



When the mission is accomplished and Superman has changed back to Clark Kent, the subway is the fastest route to the *Daily Planet*. Turn right after leaving the phone booth.

done quickly enough, the Man of Steel can reach the site of the destroyed bridge before the baddies have had a chance to melt into the woodwork. This can sometimes result in the speedy capture of Lex Luthor himself, by far the hardest of the villains to nail under ordinary circumstances.

The henchmen are really quite stupid and tend to hide in one of two places. They either sneak into the subway system or else wander aimlessly around the

four city blocks next to the Metropolis Jail. Whether this reflects dimwits or a subconscious desire to be caught is a moot point. Finding a lackey in the subway is nearly as desirable as locating one next to the jail, since the captured henchman can be flown north to the red zone, taken out to the left, and thrown in the slammer.

If Luthor's kryptonite bombs give you trouble, remember that Lois Lane is your secret weapon. Supes can't lose his powers as long as he has an armload of lady reporter. If Luthor isn't snared in the opening seconds of the game, snatch up Lois and go hunt for him. Once his store of bombs is harmlessly used up, drop Lois and make the collar.

Rebuilding the bridge is the biggest challenge for most players, especially with the helicopter spiriting off a carefully collected section now and then. Hiding the bridge pieces in the subway will sometimes, but not always, discourage the bumbling chopper.

The good old X-ray vision is particularly useful when hunting for the final crook or last bridge section. Fly horizontally from section to section, stopping briefly at each block to scan above and below. If it's a missing crook, he's in the subway. If it's a hunk of bridge, the helicopter has it. In the latter case simply carry the 'copter and bridge section to the waterfront and the span will be magically restored.

After completing the mission and changing back into Clark Kent, the on-screen character has no powers. The quickest way back to the *Daily Planet* building, where Clark must file the story to end the game, is to take the subway. The best route: Walk two sections to the right from the phone booth, cross the bridge, and enter the subway. Immediately turn left and—*viola!*—

you reach the headquarters of the city's leading newspaper.

Reaching the *Daily Planet* ends the adventure—and a long day's work, even for a *super*-man!

Video Frank Says:

Forget the bridge until you catch Luthor and his whole gang. Don't leave the pieces of the bridge lying around too long or the helicopter will snatch one.

Surround

Ability Scores

	Surround (var. #3)	*Surround* (var. #4)
Grand Master	10–2	10–0
Master	10–3	10–2
Ace	10–5	10–4
Average	10–8	10–6
Novice	10–9	10–8

NOTE: If you play with the difficulty switch at "A" while your opponent's is set at "B," add 1 pt. to your margin of victory.

Point Values

Winning a round: 1 pt.
The first person to accumulate 10 pts. is the winner.

How It Plays

Surround is one of a handful of electronic games in which two participants combat each other directly instead of alternately trying their skill against a common adversary. (The cartridge also includes several solitaire contests, but the computer does not make an outstanding opponent.)

Each player has joystick control over a cursor or, in the jargon of *Surround,* a leader block. The block can be steered in any of the four cardinal compass directions in all games, and diagonally in versions that offer this extra feature. The leader block leaves a solid trail in its wake, gradually filling up the otherwise blank screen.

The idea is to be the last player whose leader block is still functioning properly. A crash occurs when a leader block runs into the other cursor, either trail or, in some variations, the playfield boundary.

When the difficulty switch is set at "B," it is impossible for the player (or computer opponent) to back over the track block just painted onto the screen by the cursor. When the difficulty switch is moved to the "A" position, such a reversal of direction causes a round-ending crash.

Speed up (variations #3, #4, #6, #7, and #9 through #12) causes the pace of the game to quicken as the action progresses. In versions without speed-up the leader blocks always move at a constant speed.

Diagonal movement variations #5 through #7 and #10 through #12 doubles the number of directions in which the leader block can move.

Erase (variations #7 and #12) gives participants the

option of whether or not they want their leader blocks to leave a track. Pressing the red button on the controller permits the cursor to travel the field without depositing a track. Letting go of the button restores trail-laying capability.

Wrap-around (variations #8 through #12) negates the effect of the playfield borders. A cursor that leaves the screen by running off any edge will reappear on the opposite edge, still traveling in the same direction.

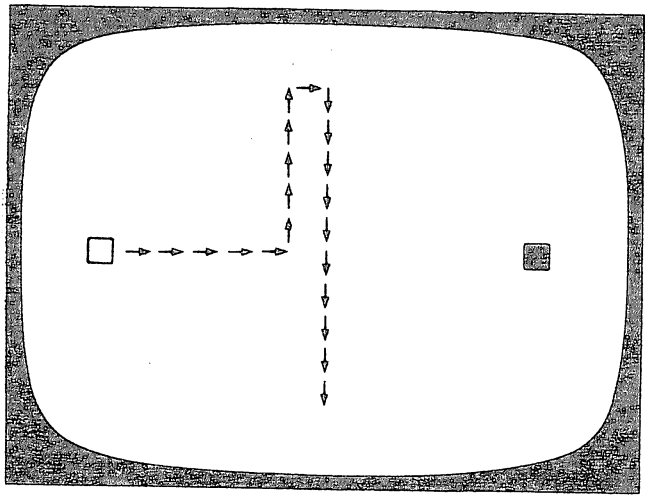
Besides *Surround,* the cartridge also includes *Video Graphitti.* This is not a game in the usual sense, but rather a drawing program for the Atari VCS.

Strategy

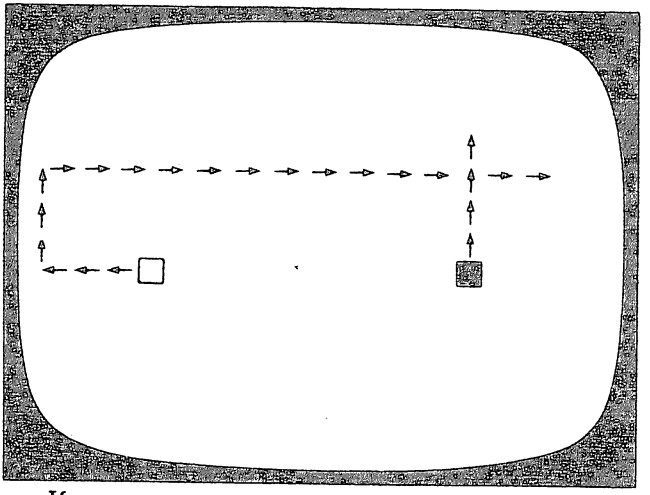
The name *"Surround"* is actually a misnomer for this classic videogame. True, encircling the other player's—or the computer's—snakelike trail is one route to victory, but there are other strategies that prove much more effective in the long run.

This is the game that embodies the principle of the territorial imperative. Always preempt as much of the playfield area as possible, as quickly as you can. Those cursors can't slither around the screen forever, and your rival's leader block will run into trouble long before yours does if it has less room to maneuver.

Get each round going by heading your cursor straight toward your foe's starting position. Get as close as your nerves—and opposing strategy—permits. Now claim a huge hunk of space by heading either straight up or straight down the field. Done correctly, this will leave you holding the lion's share of the available territory. From that point you can almost



The horizontal opening move.



If your opponent moves up, cut off the field on a horizontal, not vertical, move.

afford to ignore your rival and concentrate on accurate steering. Utilize a series of safe, screen-filling moves that let your cursor travel as far as possible between left or right turns. If you have good control of the leader block, you'll generally be able to outlast most opponents.

Another opening gambit involves moving straight up at the beginning of the round. Turn the leader block toward your opponent and then send it back down the field again. From there just follow the previous instructions. The only problem is that if you are playing an aggressive arcader, he or she may send the leader block clear across the screen horizontally before you have a chance to cut it off with a vertical move. Thus this pattern is more useful as a change-of-pace than as a regular turn-in, turn-out tactic.

Question: What happens if the other player has read this book? (If you're playing solitaire, consider yourself safe.)

Answer: There's more than one way to skin a videogame. Try crossing the field diagonally or horizontally. It doesn't matter on the exact approach you use, just as long as you end up with more than half the screen inside your track.

Tennis

Ability Scores

	Tennis (var. #2)
Grand Master	win 6–0
Master	win 6–1
Ace	win 6–2
Average	win 6–4
Novice	lose 6–4

NOTE: If playing with the difficulty switch set at "B" while opponent's switch is at "A," raise rating one notch. If the reverse situation is in effect, lower rating by one notch.

Point Values

Scoring is the same as in real tennis: 15-30-40, "deuce" at 40 all, and "ad in" or "ad out" following deuce. The first player to win six games and be ahead by two games wins the set. If players are tied at 6–6, the score resets to 0–0, and the first to carve a two-game lead wins.

How It Plays

Tennis features two solitaire games (variations #1 and #3) and a pair of head-to-head contests (variations #2 and #4). The lower-numbered game in each pair is played at full speed, while the other two versions take place at a more leisurely pace.

The left-hand joystick is always used to maneuver the orange racketeer, while the other controller will direct the blue athlete in games #2 and #4. Push the stick in any direction, and the tennis player moves to the corresponding edge of the court. The action button is only used to initiate a serve. The first serve is always in-bounds, and it is never hit either too long or short.

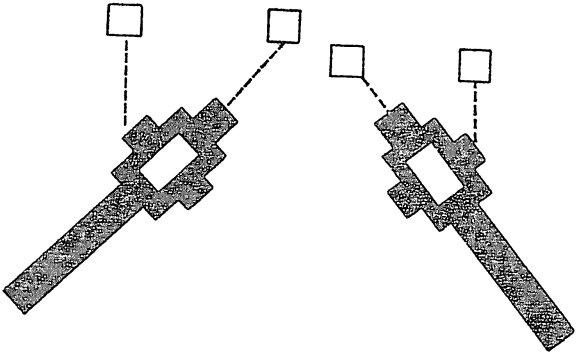
The angle of the shot is governed by where it strikes the racket. If you hit the ball right in the center, it will go straight. The closer to the edge of the racket the ball hits, the sharper the angle of the shot will be in the direction the racket is facing. Shots taken at the baseline will generally prove stronger than ones taken closer to the net. The game automatically causes both players to swing when the ball is in position to be struck.

The difficulty switches can be an important tool if there is a need to handicap one of the participants. The ball will travel at much more extreme angles when the difficulty switch for that player is in the "B" position than when it is at "A."

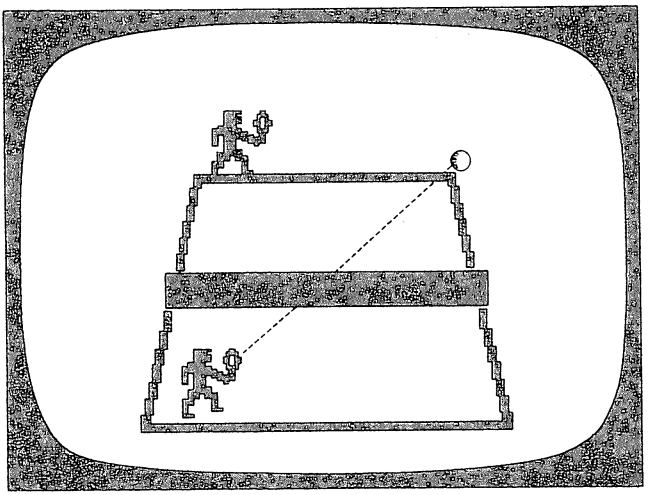
Strategy

Position, some say, means everything in life. Whether that's true or not is open to debate, but it is *certainly* everything in Activision's *Tennis* cartridge, designed by Arcade Award–winner Al Miller. Since the sole function of the action button is to serve the ball at the start of each rally, pinpoint placement of the on-screen surrogate couldn't be more important.

The game takes place on a trapezoidal court. A solid white net is strung horizontally across the middle of the screen. The design simulates depth-of-field, even giving the ball a shadow to enable competitors to gauge its height off the ground, but only experience will enable the players to properly perceive it.



Angles of deflection from the rackets.



Hit the cross-court "killer" when your opponent is in one of the corners.

When *Tennis* is played with the difficulty lever moved to the "B" setting, it is possible to serve and return shots at some pretty severe angles. Masters and grand masters quickly learn to anticipate the direction of the opponent's shot by the position of the on-screen player as he swings his racket.

When returning the serve, however, a position at the center of the baseline is always best. The player with service may sometimes switch around at the last instant and blast the ball from the opposite side, which

will catch the unwary tennis maven moving in the wrong direction. That's a fatal mistake in Activision *Tennis*. Wait for the other player—human or computer—to actually hit the serve before responding in any manner. By careful observation you'll be able to predict the actual destination of the serve to be breaking in the right direction. Of course there's nothing to be done when the server dishes up a perfect ace.

The deadliest shots are those taken at the sharpest angles. It won't do, though, to just whack the ball at the most extreme angle every single time. Your rival will soon figure out your strategy, and it won't be long before he or she takes control of the pace of the match. It's much more sensible to use standard shots to set up the real killer. When the time is ripe, use the edge of the racket to punch the ball cross-court. If your on-screen representative is moving when the ball makes contact with the flame of the racket, it will add steam as well as english to the stroke.

Approach the net only with considerable caution. Hang back near the baseline until you've acquired some familiarity with the play-action in general and your rival's brand of tennis in particular.

Once things are under control, a surge to the net can be a devastating countermove against the type of player who specializes in wide-angle smashes. Running up to the net has much the same effect as when a hockey goalie comes out of the crease to meet the shooter—it cuts down on the angle. The drawback: Any shot will reach you much sooner when your on-screen athlete is playing close, which means that you'll have to bear down and anticipate your foe's placements.

If you favor volleying from close to the net, beware

of the court's blind spot. Since the divider is solid white, a ball is lost against it for a heartbeat on every single shot. Be careful to note the ball's trajectory before it crosses the net and vanishes from view temporarily. This will aid you in anticipating where it will go once it crosses over to your side of the court.

Since we've counseled arcaders to practice, practice, practice, throughout the pages of this book, it's nice to be able to report that *Tennis* offers a near-perfect setup for those who aren't ready to go up against the best and want to improve. Put the computer player's difficulty switch on "B" and yours on "A." The computer-controlled tennis player will almost never flub a shot it can reach. With the handicap in force your wide-angle plays are virtually eliminated. This leads to full-length back-and-forth exchanges that will improve your response time and hone your ability to position your athlete properly.

Video Frank Says:

Get your opponent moving back and forth across the court, and the game will be yours. Control the flow.

Video Olympics

Ability Scores

	Pong (var. #3)	*Soccer* (var. #13)	*Volleyball* (var. #39)
Grand Master	21–5	21–7	21–10
Master	21–10	21–10	21–12
Ace	21–14	21–13	21–15
Average	21–18	21–15	21–18
Novice	a win	21–18	a win

NOTE: If you have difficulty set on "A" while your opponent is using difficulty "B," subtract 2 pts. from your foe's losing score and then apply the result to the chart above.

Point Values

Every time a shot is missed by one player (or the computer in solitaire games), the successful player is credited with 1 pt.

How It Plays

The way it was. *Video Olympics*, one of the very first cartridges produced for VSC, takes the basic idea of ball-and-paddle games in the *Pong* mold and elaborates the concept into fifty games. The cartridge includes eight types of contests. These are:

Pong (variations #1 through #8) is the traditional version with some minor variations. Each player uses the paddle to control a vertically mobile bat. They use these on-screen strikers to hit a cursor (representing the ball) back and forth across the net, which is symbolized by a line that vertically bisects the playfield. This group consists of *Pong* games for one, two, or four participants.

Super Pong (variations #9 through #12) gives each player two bats instead of one. *Super Pong 4*—#11 and #12—provides each member of a two-man team a pair of strikers.

Strategy

Video Olympics is an electronic octathalon that will test gamers' skills at a variety of ball-and-paddle contests. Let's review the various events one by one:

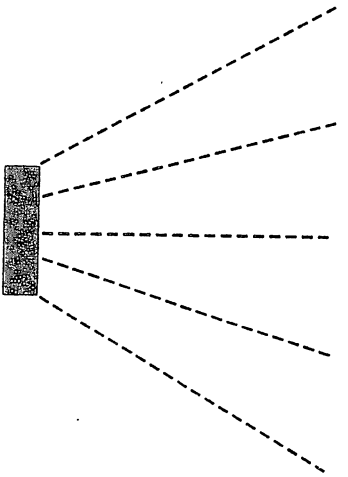
Pong. This is the great-granddaddy of all videogames. Breathes there an arcader with soul so dead that a nostalgic journey into yesteryear holds no appeal?

The best strategies for *Pong* derive from the sport of Ping-Pong on which it is loosely based. You can—and should—rally for turn after turn, simply returning

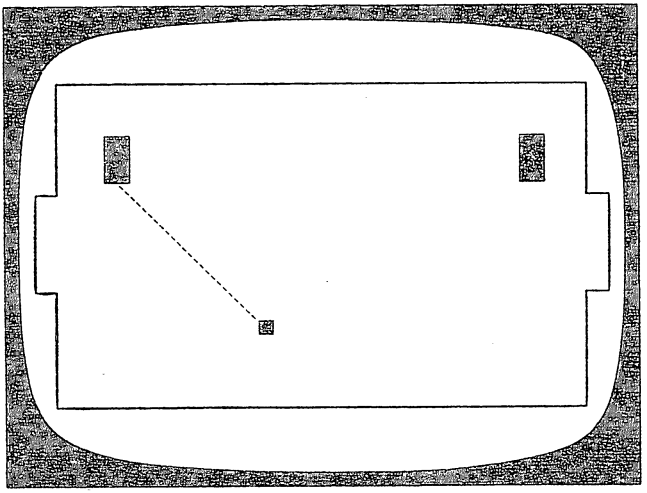
everything hit onto your side of the court. Then when you've lulled your adversary into a false sense of security, launch the sharply angled ace that will win the point.

The deadliest shots are made by striking the ball with the edge of your on-screen paddle while it is in motion. This sends the ball back at an extreme angle. You can also add extra speed (in variations of *Pong* that include the "whammy" feature) by hitting the action button as the ball makes contact with your bat.

The important thing to remember is that the angle of the shot is determined by the segment of your bat that the ball contacts.



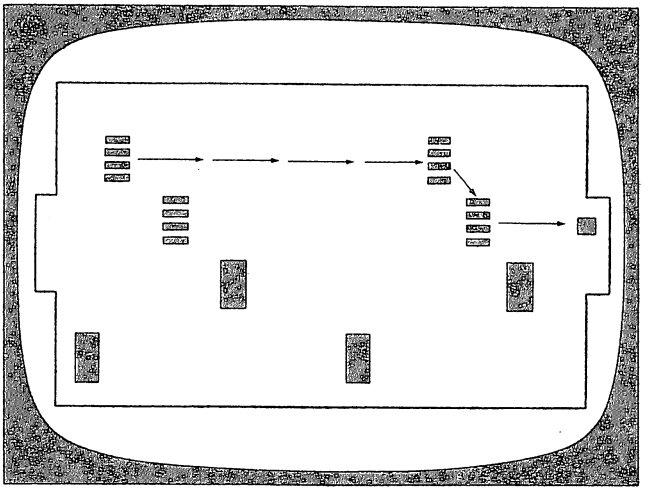
Angles of deflection from the Pong paddle.



Slice a shot in *Pong* by hitting it on the corner of your paddle.

Soccer and *Hockey.* Both of these categories of games demand that the player develop one particular skill, which is why they're being treated together. In both cases the overriding need is to acquire the ability to deflect shots.

In both games each participant controls two widely spaced paddles. The best way to score is to launch a shot with the back man. Even as the rival goalie gets set to defend, you must call your other man into the fray. As the ball passes your forward, chop down on the shot. This will radically alter the ball's trajectory and, hopefully, slip it past the out-of-position goalkeeper.



Deflecting a goal off your players in *Soccer.*

Foozpong. This is a really wild variation on the original game, especially the four-player mode with its four columns of on-screen paddles. The important element of this game is that though there are four bats in each column, only three are visible on the screen at a time. This means you can occasionally return a boundary-hugging smash by bringing the "off-screen" man back into play at just the right moment.

Quadrapong. Action is blindingly fast, putting a definite premium on nimble reflexes and hand-eye coordination.

Handball. It may look different from good old regular *Pong,* but it actually plays pretty much the same

way. *Handball* makes a very good practice exercise if you're determined to become the electronic tennis champ of your neighborhood.

Volleyball. Since the ball gains height each time it is hit by one of the electronic players, it's a good idea to pass the sphere around a little before trying to scale the net. It is, in fact, often impossible to boost the ball high enough without hitting it at least twice.

The objective should always be to force your opponent away from the net. As long as he or she is hitting shots from the back court, it is unlikely that you'll have to deal with any shots you can't handle. Meanwhile the farther back your rival must play, the closer to the net your team can approach. A good spike delivered at this juncture has an excellent chance of scoring a point.

Basketball. For starters forget everything you know about Dr. Naismith's game. This plays a lot more like *Pong* than it may at first appear. Learning the angles of deflection—easily accomplished with a little practice—can turn almost any gamer into a court king.

Soccer (variations #13 through #18) alters the complexion by putting a goal at each side of the playfield. Each player controls a pair of kickers, and there are both two- and four-player modes. The action button is used to put the ball in play after a goal.

Foozpong (variations #19 through #22) transfers the popular game Foozball to the *Pong* arena. Each player has two rows of bats with which he must bounce the ball into the opposing goal.

Hockey (variations #23 through #32) is *Pong* on ice, with a hockey-style net at the extreme left and right ends of the playfield. The differences among the vari-

ous games boils down to how many skaters each team can command.

Quadrapong (variations #33 through #34) is a partnership game in which two players control the paddles for each side. There are two goal-mouths which each tandem must defend, meaning that there is a goal slot on every face of the rectangular field.

Handball (variations #35 through #38) is another relic of videogaming's glorious infancy. Competitors take turns hitting the ball against the left side boundary. Half of the four variations are for four players, each directing a bat.

Volleyball (variations #39 through #42) turns the center dividing line of *Pong* into a net as seen from a side perspective. Instead of shooting the ball across this barrier, players must arc shots over the net, which extends from the bottom of the screen to above halfway up the playfield. The more exciting variations permit players to spike the ball by pressing the action button.

Basketball (variations #43 through #50) is the ancestor of Atari's *Basketball* cartridge, minus any attempt to provide depth for the court. Each arcader uses the paddle to control one on-screen player. This hoopster can move only in the horizontal plane and is restricted to the half-court nearest the basket which he must defend. The baskets themselves are located at the sides of the playfield, roughly two thirds of the way to the top.

Things to Come

With all the claims and counterclaims manufacturers of programmable home videogames are making in their advertisements these days, it is only natural for thoughtful VCS owners to ponder the rapidly changing situation. Many have written about their doubts to *Electronic Games* magazine.

"Is my Atari VCS about to become obsolete?" ask worried VCS fans. The answer, thankfully, is that the most popular of all the game-playing systems definitely has a few years of useful life left.

Certainly that's the prevailing attitude within the industry itself as it prepared for the 1982 holiday gift-giving season. Though most companies are reluctant to try to force their way into the electronic gaming market with an entirely new system, a surprising number have made a substantial commitment to provide additional cartridges to further expand the already huge library of videogames. It is entirely possible that as many as sixty new Atari-compatible games will reach the stores for the first time this year, and there's no letup in sight for 1983!

Those guys from Sunnyvale, California, won't exactly be resting on their laurels while upstarts reap the rewards. Atari is planning to issue approximately a cartridge per month for the next year or so. *Haunted*

House and *Pac-Man* should be out by the time you read this, with more adventure and arcade-style titles to follow. Action fans will find considerable challenge in *Defender* and *Berserk,* while electronic heroes will soon be able to test their mettle against a pair of quest games, *Adventure I* and *Adventure II,* scheduled to make their debut this fall.

Atari is also very actively seeking the licenses for home versions of popular coin-op machines. A deal with Centuri will eventually result in the production of such classics as *Phoenix* for the VCS.

Activision will attempt to hold off the flood of new independent software suppliers by introducing as many as eight new cartridges before the end of the current year. The company's staff of designers has earned a reputation for seldom producing anything but outstanding games, and previews of upcoming ACTV titles indicate that none of the new ones is likely to tarnish the company's image.

Two of the most intriguing cartridges are *Starmaster* and *Chopper Command.* The former is a space adventure game that places the gamer at the controls of an interstellar cruiser out to save the civilized universe. *Starmaster,* the creation of Al Miller, combines both tactical and strategic levels of play.

Chopper Command might be called a distant cousin of *Defender.* It is a horizontally scrolling shootout in which the arcader flies an armed helicopter hither and yon in an attempt to safeguard the convoy laboring its way across the bottom of the playfield.

Coleco, which also intends to market its own videogame system, will attempt to please VCS owners with as many as a half-dozen new cartridges. Most will be home versions of popular coin-op videogames. The

most eagerly awaited title is undoubtedly *Donkey Kong,* with *Mouse Trap* and *Venture* close behind.

U.S. Games intends to release at least eight VCS-compatible cartridges between now and January. Leading the way will be *Space Jockey,* a horizontally scrolling shootout that will test the reflexes of even the mightiest hand-eye wizards.

Parker Brothers is also gearing up to become a major supplier of VCS software. There'll probably only be two titles from the maker of *Monopoly* in 1982, but—wow!—they look like two superhits. First out of the chute will be a little number called *The Empire Strikes Back.* This is definitely one time when the game will certainly be good enough to bear the exalted name. This horizontal scroller gives the arcader a chance to see if he or she can bring down four powerful imperial walkers with an equal number of snow speeders.

The other title is *Frogger.* Spiced up with some of the best visuals to be found on any VCS cartridge, this looks to be a fairly faithful re-creation of the coin-op. The gamer attempts to hop frogs across a highway and then a stream. If the trucks don't get you, the alligators might.

Imagic is yet another new company formed for the express purpose of making videogame cartridges. Although it will eventually make games for the Intellivision as well, the supplier will start with three titles for the VCS. These are *Trickshot,* a video pool game with slick graphics; *Demon Attack,* a space shootout rendered in vivid colors; and *Star Voyager,* a strategic/tactical intersteller adventure.

Not all companies are completely candid about their future plans. After all this is a very competitive

market. Mattel, Games by Apollo, Ultra-Logic, and perhaps Computer Magic will be offering their own lines of cartridges for the VCS.

Somewhat outside VCS territory but still presumably of interest is Atari's upcoming Super-game. This senior programmable videogame system will sell for about $350, and it is intended to provide arcade-quality home editions of coin-op winners like *Pac-Man* and *Centipede* as well as a selection of sports simulations. Unfortunately it will not be compatible with the VCS.

Atari has announced its intention to continue to support both systems, and many of the most popular games will have both VCS and Super-game editions. It is hoped by the company that its two game-players will prove complementary, and VCS owners will be encouraged to look at the Super-game when looking to add a second system.

All and all, it looks like heaven on earth for Atari owners for at least the next twelve to eighteen months.

Video Gamer's Glossary

Brief Definitions of Commonly Used Terms in Electronic Gaming

Action Button—The red button on the joystick controller. It is often used to fire weapons in videogames.

Arcade—An establishment that features coin-op games.

Arcader—A person who is a participant in the hobby of electronic gaming. See *Gamer.*

Byte—The unit of measure for electronic information storage. For instance, "2K bytes" would mean 2,000 bytes of memory. The larger the number of bytes, the more intricate the game can be.

Chip—Short for computer chip. The chips store the game programs.

Cursor—A small square, usually shown as white on the screen. It is frequently used to represent a ball in videogames.

Gamer—A player. In this book *gamer* is used to refer to someone who enjoys electronic games such as those from the Atari VCS.

Joystick—This type of controller consists of three main elements: a base to hold the electronics, a shaft mounted perpendicular to the base that generally controls movement, and the action button.

Life—One round of play within a videogame. Many programs give the gamer a supply of cannons, spaceships, or whatever, but these are only available one at a time. Each time one is lost, a reserve unit will be automatically activated—until they are all used up and the game ends.

Paddle Controller—The second most frequently used command device for VCS-compatible games. The main controls are a knob (for governing steering in most instances) and a side-mounted action button.

Paddle—This often refers to an on-screen bat (a double-length cursor) used to strike a moving object in a game.

Pong—The tennislike coin-op game that launched the company now known as Atari. It was invented by the firm's founder, Nolan Bushnell.

Programmable Videogame—A microprocessor-based device that accepts game software programs stored on cartridges.

Round—One turn within a videogame. See *Life*.

Scroll—This feature may be likened to a pan shot in the movies. When the player's on-screen representative moves off the screen through one of the scrollable edges, the view of the playfield adjusts to keep it visible.

Videogame—An entertainment contest that uses a television set or other video monitor as an output device.

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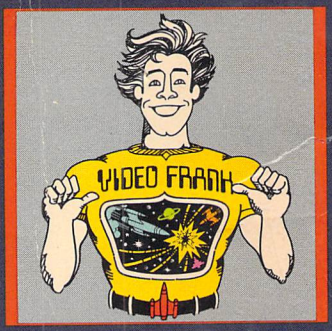

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